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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

LDEO-DES

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OCI I S 2001

PERMITS DIVISION

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (7000 0520 0022 2564 2032)

Mr. Earl Shipp Site Leader The Dow Chemical Company Louisiana Operations P.O. Box 150 Plaguemine, LA 70765-0150

Re:

NPDES Permit No.LA0003301

Public Notice of Final Permit Decision

Dear Mr. Shipp:

Enclosed are the following: the public notice of the Agency's final permit decision, a copy of our response to comments, and the final permit. This public notice describes any substantial changes from the draft permit.

Should you have any questions regarding the final permit, please feel free to contact Brian W. Mueller of the NPDES Permits Branch at the above address or VOICE:214-665-7167, FAX:214-665-2191, or EMAIL:mueller.brian@epa.gov. Should you have any questions regarding compliance with the conditions of this permit, please contact the Water Enforcement Branch at the above address or VOICE:214-665-6468.

Sincerely yours,

Gregg A. Cooke

Regional Administrator

Enclosares

(w/enclosures): Louisiana Department of Environmental Quality

changes from the draft to the final permit decision. The 30-day period within which a person may request review und 124.19 begins with the serving of this notice of the Regional Administrator's action. Specifics as to the required contents on any petition for review are set out in 40 CFR 124.19

U.S. Environmental Protection Agency - Region 6 Public Notice of Final Permit Decision

OCTOBER 13, 2001

This is to give notice that the U.S. Environmental Protection Agency, Region 6, has made a final permit decision and will issue the following Proposed Permit(s) under the National Pollutant Discharge Elimination System. The Permit (s) will become effective no sooner than 30 days from the date of this Public Notice. Any substantial changes from the Draft Permit are cited.

This issuance is based on a final staff review of the administrative record and comments received. A Response to Comments is available by writing to:

Diane Smith Customer Service Branch (6WQ-CA) U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue Dallas, Texas 75202-2733 (214) 665-2145

Any person may request an Evidentiary Hearing on the final permit decision. However, the request must be submitted within 33 days from the date of this Notice. The request should be in accordance with the requirements of 40 CFR 124.74 (Federal Register Vol. 45, No. 98, Monday, May 19, 1980). The original public notice contains the stay provisions of a granted evidentiary hearing request.

Within 30 days after service of an initial decision, or a denial in whole or in part of a request for an evidentiary hearing, any person may file an appeal in accordance with the requirements of 40 CFR 124.91. Submissions may be mailed to: U.S. Environmental Protection Agency, Environmental Appeals Board (MC-1103B), 401 M Street, SW, Washington, D.C. 20460. Hand-delivered submissions may be made at: U.S. Environmental Protection Agency, Environmental Appeals Board, Westory Building, 607 14th Street, NW, Suite 500, Washington, D.C. 20005.

Further information including the administrative record may be viewed at the above address between 8 a.m. and 4:30 p.m., Monday through Friday.

AUTHORIZATION TO DISCHARGE TO WATERS OF THE UNITED STATES, NPDES PERMIT NO. LA0003301.

The applicant's mailing address is:

Dow U.S.A. The Dow Chemical Company P.O. Box 150 Plaquemine, LA 70765-0150

The discharge(s) from this existing discharger are to receiving water(s) named Mississippi River in Segment No. 070301 of the Mississippi River Basin. The known uses of the receiving water are:

MISSISSIPPI RIVER (WATERBODY SEGMENT CODE NO. 070301)

Primary Contact Recreation Secondary Contact Recreation Fish and Wildlife Propagation Public Water Supply

Segment 070301 is currently of the Mississippi River is listed on the modified court ordered 303(d) list of impaired waterbodies. The suspected causes for impairment are mercury, pesticides, phosphorus, nitrogen, and pathogen indicators. The is Mississippi River is set for TMDL completion in 2007. The effluent data provided by the permittee that indicates that the facility does not cause or contribute to the impairment of Segment 070301, additionally effluent limitations and other controls in the permit will prevent the discharge from contributing to the impairment.

The facility is located on Louisiana Highway 1 in Plaquemine, Louisiana in both Iberville and West Baton Rouge Parishes. Under the Standard Industrial Classification (SIC) Code(s) 2869 & 2819, the applicant currently manufactures organic and inorganic chemicals.

The final permit has been revised to reflect the December 12, 2000, Conditions of Certification by the Louisiana Department of Environmental Quality and the comments Letter Bello (Dow) to Mueller (EPA) dated July 24, 2000, and updated application data received from Dow Chemical dated November 28, 2000. A copy of EPA's Response to Comments will be made available upon request.

Under 40 CFR 124.19, any person who filed comments on the draft permit proposed in connection with this matter may, within 30 days after issuance of this final permit decision, petition the Environmental Appeals Board to review any condition of this permit decision, including the decision by the Regional Administrator to grant the permittee's request for a variance based on the existence of "fundamentally different factors: from those on which the effluent limitation guideline was based (see 40 CFR 124.64(b)). Any person who failed to file comments on the draft permit may petition for administrative review only to the extent of the

NPDES PERMIT NO. LA0003301 RESPONSE TO COMMENTS

RECEIVED ON THE SUBJECT DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT IN ACCORDANCE WITH REGULATIONS LISTED AT 40CFR124.17

APPLICANT:

Dow USA

The Dow Chemical Company

P.O. Box 150

Plaquemine, Louisiana 70765-0150

ISSUING OFFICE:

U.S. Environmental Protection Agency

Region 6

1445 Ross Avenue

Dallas, Texas 75202-2733

PREPARED BY:

Brian W. Mueller

Environmental Engineer Permits Section (6WQ-PO) NPDES Permits Branch

Water Quality Protection Division

VOICE: 214-665-7167 FAX: 214-665-2191

EMAIL: mueller.brian@epamail.epa.gov

PERMIT ACTION:

Final permit decision and response to comments received on the

draft reissued NPDES permit publicly noticed on May 27, 2000

DATE PREPARED:

January 3, 2001

PAGES:

11 (TEXT)

89 (APPENDIX)

Unless otherwise stated, citations to 40CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations, revised as of 7/1/00.

PERMIT NO.LA0003301 RESPONSE TO COMMENTS TEXT

PAGE 2

STATE CERTIFICATION

State Certification from Bliss Higgins of the Louisiana Department of Environmental Quality (LDEQ) dated December 18, 2000.

1. The copy of the draft permit has water quality based hexachlorobenzene (HCB) limitations of 2.51 lbs/day monthly average and 10.16 lbs/day daily maximum. It could not be determined from the fact sheet how these values were derived. It appears the limitations for HCB should be 1.18 lbs/day monthly average and 2.82 lbs/day daily maximum. The fact sheet should clearly identify the WQ based limitations.

RESPONSE

The final permit has been corrected to reflect the correct water quality based values for hexachlorobenzene of 1.18 lbs/day monthly average and 2.82 lbs/day daily maximum at Outfall 001. The appendix contains calculations and revised permit pages.

Outfall 001 establishes water quality based limits for (HCB). The permit has about 15 internal outfalls to 001 which have mass limits for HCB. The sum of the mass limits for the internal outfalls exceed the WQ based limits at outfall 001. With the sum of the internal outfalls exceeding the WQ based limits and the MQL for HCB at 10 ppb, HCB could be discharged from the internal outfalls above the 001 WQ based limits. (The flow rate at outfall 001 is 550 MGD. At this flow rate, 9 ppb (less than the MQL for HCB) equals 41 lbs/day. The WQ based daily maximum HCB allowance at outfall 001 is 10.16 lbs/day.) Therefore, it is suggested that none of the HCB limitations at the individual internal outfalls exceed the WQ based HCB limits at outfall 001 and all the internal outfalls with mass HCB limits be footnoted so that the sum of the HCB discharged at these internal outfalls should not exceed the WQ based limits for outfall 001.

RESPONSE

The final permit has been modified to insure that no individual internal outfall will discharge more than 1.18 lbs/day monthly average and 2.82 lbs/day daily maximum of hexachlorobenzene. The final permit will require that the summation of the mass loading of hexachlorobenzene for Internal Outfalls (101, 531, 741, 911, 931, 1031, 1041, 1051, 1521, 1531, 1711, 3121, & 2001) shall not exceed 1.18 lbs/day daily average and 2.82 lbs/day daily maximum when sampling is done at those outfalls.

Page 10 of the fact sheet appendices lists outfall 001 flow rate as 355 cfs. Page 3 of the fact sheet and page 4 of the fact sheet appendices lists outfall 001 flow rate as 550 MGD or 851 cfs. Why is a different flow rate used on page 10 of the fact sheet appendices?

جمعوه أنتهم والرابي المحافظ المويوات الأوارا والراب

relatively uncontaminated. The limitations proposed for these outfalls are a daily maximum TOC limit of 55 mg/L and a pH limit of 6-9. For relatively uncontaminated stormwater outfalls, the state normally uses daily maximum limitations of 50 mg/L TOC and 15 mg/L oil & grease with a pH of 6-9. It is suggested that a daily maximum of 50 mg/L TOC be used or justification be provided for each outfall if the 55 mg/L TOC limitation is used. The oil & grease limit need not be included provided justification is provided stating why the oil & grease limitation is not appropriate.

RESPONSE

The stormwater outfalls will be modified as requested. The appendix contains the revised permit pages for the outfalls in question.

8. At some outfalls effluent limitations increased from the previous permit, including but not limited to 2001 and 301 (311 & 321 in the previous permit), without justification in accordance with LAC 2361.L.2.a [122.44(1)(2)(1)].

RESPONSE

The technology based limitations in the permit are based on new information, increased production and new effluent guidelines provided in the permit application. Therefore the limitations comply with LAC 2361.L.2.a [122.44(1)(2)(1)].

9. Fact sheet Appendix F (Outfall 531), page 52 lists the once-through, non-contact (OTNC) cooling water flow rate as 64.6 Mlbs/day. On page 54 of the fact sheet appendices in the calculations table, the OTNC cooling water flow is listed as 129.7 Mlbs/day. Which is correct? In the same table, the BPJ allocation for the OTNC cooling water is listed as 50% of the guideline TSS value. However, on page 55 of the fact sheet appendices, a continuation of the same table, uses 42 mg/L to calculate both the average and maximum TSS allocation for the OTNC cooling water. Why was 42 mg/L used to calculate the OTNC cooling water allocation for TSS?

For the same outfall, the fact sheet uses a process wastewater flow rate of 23.6 Mlbs/day to calculate the BOD and TSS limits. However, 14.27 Mlbs/day is used to calculate the limits for toxic organic parameters. The fact sheet does not explain why different flow rates were used.

RESPONSE

See the appendix for the revised calculations for Outfall 531. The once through cooling water allocation of 42 mg/l is based on data provided by the facility. The cooling water for this outfall is unclarified Mississippi River water. The calculations also reflect updated application data received in the November 28, 2000, letter from Dow.

RESPONSE

The fact sheet is in error. The correct flow rate is 851 cfs. The water quality screening was conducted again and there are no additional water quality based limitations established in the permit. The limitations at Outfall 001 for hexachlorobenzene have revised as per comment number one. Also the biomonitoring dilution series has been revised in Part II of the permit. The appendix contains a revised water quality screening for Outfall 001 and the revised page in Part II of the permit.

4. On page 30 of the fact sheet appendices, 355 cfs was used to determine the critical dilution. Similar question to No. 3 above, why was 355 cfs used rather than 851 cfs?

RESPONSE

See the response to comment number three.

5. Page 33 of the fact sheet appendices indicates that the daily average TSS limits are based on the effluent guidelines, 40 CFR 414, Subpart D, but they are actually based on the FDF variance. Why not indicate that they are based on the FDF variance? Additionally, it is suggested that the monthly average concentration value for chloroform in the table on page 34 of the fact sheet appendices and the monthly average and daily maximum concentration values for methyl chloride in the table on page 94 of the fact sheet appendices be footnoted to indicate that these values are the results of an FDF variance.

RESPONSE

The comments have been added to the administrative record.

6. The fact sheet lists outfalls 6201 and 7401 as clarified non-contact cooling water and maintenance water from the Glycol 1 tank farm and only requires reporting flow. Outfalls 2931, 2941, 2961 and 2971 are listed as stormwater and maintenance water from the Glycol 1 tank farm. These outfalls have limitations for pH and TOC. Why don't 6201 and 7401 have pH and TOC limitations?

RESPONSE

Outfall 6201 and 7401 have been modified to include limitations for TOC and pH. The appendix contains revised Part I of the permit for Outfall 6201 and 7401.

 Page 30 of the fact sheet lists 18 internal outfalls which consists of stormwater and maintenance waters from non-process areas. It is assumed that these effluents should be

PERMIT NO.LA0003301 RESPONSE TO COMMENTS TEXT

COMMENTS RECEIVED ON DRAFT PERMIT

Letter Bello (Dow) to Mueller (EPA) dated July 24, 2000 Letter Bello (Dow) to Mueller (EPA) dated November 28, 2000

RESPONSE TO COMMENTS

EPA has reviewed the following comments and changes requested and adjusted the limitations for those outfalls where a change in the flow rate would change the limitations in the permit.

- 1. Page 11, Outfall 471 Glycol I DELETE(Flow - 0.66 MGD) ADD(Flow - 0.0053 MGD)
- 2. Page 11, Outfall 6201 Glycol I DELETE(Southwest Corner) ADD(East Side)
- 3. Page 16, Outfall 741 Light Hydrocarbons #2
 Delete(lab sink drains, and liquid analyzer blowdown to) ADD(analyzer sampling cooling water, and air conditioning cooling water)
- 4. Page 17, Outfall 811 Glycol II
 ADD(, and once through non-contact cooling water)
- 5. Page 17, Outfall 911 Polyethylene B
 DELETE(cooling tower, blowdown, once through cooling / plant air system)
- Page 18, Outfall 931 Polyethylene B
 DELETE(and) between wastewater and process
- 7. Page 18, Outfall 931 Polyethylene B ADD(cooling tower blowdown, once through cooling / plant air system, and pellet cooling tower) after stormwater,
- 8. Page 19, Outfall 1011 Polyethylene A
 DELETE(Flow 6.5 MGD) ADD(Flow 86.4 MGD)
- 9. Page 19, Outfall 1031 Polyethylene A
 DELETE(Flow 2.13 MGD) ADD(Flow 2.53 MGD)
- Page 20, Outfall 1051 Polyethylene A
 DELETE(Flow 0.12 MGD) ADD(Flow 0.1839 MGD)

10. The BOD or TSS allocations given for utility water and cooling water are not consistent for different outfalls with no explanation in the fact sheet. At some outfalls no allocation is given, for some outfalls the allocation is 25% of guidelines for TSS or BOD, and for other outfalls the allocation for TSS or BOD is 50% of guidelines. The fact sheet should briefly explain the allocations given.

RESPONSE

BPJ allocations for utility and other non OCPSF wastewaters were based on information provided by the permittee in the application.

11. Need to attach a summary of previous biomonitoring results to the fact sheet. EPA has told the state that our fact sheets must contain this information.

RESPONSE

The previous permit required quarterly 24 Hour acute biomonitoring at 100% effluent for the first two years of the permit. The permit was issued in June 1988, and the biomonitoring requirements expired in 1990. The facility did not report any test failures. A complete history of the facility biomonitoring test results has been sent to LDEQ and is part of the administrative record.

Outfall 2001 is the main process wastewater discharged with a flow rate of 22.8 MGD. The previous permit contained limitations and daily monitoring for total oxygen demand (TOD) and TSS and 1/week monitoring for BOD. The draft permit has 2/week monitoring for BOD and TSS and has dropped the TOD limitations and monitoring (no explanation regarding the deletion of TOD - it is assumed TOD was removed because it is not included in OCPSF guidelines). Our main concern is the reduction in monitoring frequency at a major outfall such as this which is discharging into a drinking water supply. The previous permit had daily monitoring and this permit only requires 2/week monitoring. It is suggested that the monitoring frequency for BOD be at least 3/week if not more frequent.

RESPONSE

The final permit establishes a sampling frequency of 1/day for BOD5 and TSS. The TOD requirements were removed from the permit. The reason for their removal is that TOD was not included in the final OCPSF guidelines published after the previous permit was issued. Therefore based on this new information all TOD limitations in the permit have been deleted.

PERMIT NO.LA0003301 RESPONSE TO COMMENTS TEXT

PAGE 8

- 25. Page 31, Stormwater from Industrial activity Outfalls deleted from previous permit ADD(Internal Outfall 241 Deleted No Longer Used)
- 26. Page 31, Stormwater from Industrial activity Outfalls deleted from previous permit ADD(Internal Outfall 001 From Permit LA 0049638, renumbered 002 in re-issued permit LA0003301)
- 27. Page 32, Variance Requests DELETE(Methylene) ADD(Methyl)
- 38. Page 34, Administrative Record A. Permits ADD(NPDES Permit No. LA0049638)

COMMENTS ON FACT SHEET APPENDICES

- 1. Page 1, Appendix H DELETE(911) ADD(911 A & B)
- 2. Page 3, Flow (MGD) Technology limitations DELETE(1.71) ADD(1.79)
- 3. Page 3, Flow (MGD) Technology limitations DELETE(0.81) ADD(1.161)
- 4. Page 3, Guidelines Technology limitations DELETE(414.100) ADD(414.90)
- 5. Pages 45,56,61, and 107 Calculation of Toxic Organic Permit Limitations DELETE(mg/L) ADD(ug/L)
- 6. Page 58, Outfall 741Condensate DELETE(0.22) ADD(1.23) Miscellaneous Flow DELETE(0.22) ADD(1.23) Total Flow DELETE (2.99) ADD(4)
- 7. Page 63, Outfall 911 Appendix H
 DELETE(Outfall 911 (internal)) ADD(Outfall 911 A & B (internal))
- 8. Page 63, Outfall 911 OCPSF Process Wastewater ADD(Reactor Process Wastewater(911B) 1.68)

PERMIT NO.LA0003301 RESPONSE TO COMMENTS TEXT

PAGE 7

- 11. Page 21, Outfall 1101 Sanitary Sewer
 DELETE(Flow 0.51 MGD) ADD(Flow 0.12 MGD)
- 12. Page 22 Outfall 1311 Power I
 DELETE(Flow 131.5 MGD) ADD(Flow 129.5 MGD)
- 13. Page 22, Outfall 1411 Water Treating DELETE(Flow 7.6 MGD) ADD(Flow 0.171 MGD)
- 14. Page 23, Outfall1521 Chlorinated Methanes ADD(, process area stormwater, and maintenance water)
- 15. Page 23, Outfall1521 Chlorinated Methanes DELETE(and) between water and cooling
- 16. Page 23, Outfall 1531 Chlorinated Methanes
 DELETE(for further treatment depending upon analytical laboratory results prior to discharge)
- 17. Page 23, Outfall 1531 Chlorinated Methanes ADD(and / or chlorine plant for use) after Operations...
- 18. Page 26, Outfall 2231 Light Hydrocarbons #3 DELETE(recovered groundwater, firewater,)
- 19. Page 26, Outfall 2241 Light Hydrocarbons #3 Section D
 ADD(non-contact waters, and recovered groundwater) after down wastewater
- 20. Page 26, 2241 Light Hydrocarbons #3 Section D DELETE(and) between water and slab
- 21. Page 29, Outfall 002 Block 110 Tankfarm ADD(was 001* on permit LA0049638) after 002
- 22. Page 30, Stormwater from Industrial activity DELETE(Internal Outfalls 241 Cellulose)
- 23. Page 31, Stormwater from Industrial activity Outfalls deleted from previous permit ADD(Outfall 002 Covered by General Permit)
- 24. Page 31, Stormwater from Industrial activity Outfalls deleted from previous permitt ADD(Internal Outfall 1751 Deleted Never Used)

RESPONSE

The permittee has the option of using any approved EPA Method found in 40 CFR 136. However, the MQL for residual chlorine will remain 100 uq/l for compliance purposes.

2. For Outfalls 1521 and 1531, Dow request the reporting limit for OCPSF samples too be doubled from 10 ppb to 20 ppb. Due to the matrix of these outfalls, dilution will help the analysis and since the dilution is only times two, compliance can still be easily determined.

RESPONSE

Part II .A specifies the procedure the permittee must follow to establish a matrix specific MQL. The permittee should submit this information after the effective date of the permit.

3. Many Outfalls have sample frequencies of 1 / day for various parameters such as BOD, TSS or Volatiles. Dow requests the sample frequency be reduced to 3 / weeks for these outfalls.

RESPONSE

This request is denied as per the request of the Louisiana Department of Environmental Quality.

4. Stormwater outfalls 2911 and 2951 have sample frequencies of 1 / week. Dow requests the sample frequencies be reduced to 1 / month for these outfalls.

RESPONSE

EPA has discussed this request with LDEQ and has decided to leave the monitoring frequency for Outfalls 2911 and 2951 at 1/week.

5. Dow requests that concentration based limits be reported on the DMR in milligrams per liter (except toxicity).

RESPONSE

The DMR format is a permit enforcement issue and should be discussed with the Louisiana Department of Environmental Quality, the agency responsible for enforcing the permit.

PERMIT NO.LA0003301 RESPONSE TO COMMENTS TEXT

9. Page 63, Outfall 911 OCPSF Flow DELETE(0.993) ADD(1.161) Total Flow DELETE(1.425) ADD(1.593)

10. Page 73, Outfall 1031 MGD Column Plant Washdown
DELETE(0.0024) ADD(0.0159)
OCPSF FLOW
DELETE(0.0664) ADD(0.0794)
Non-contact Cooling Water
DELETE(2.065) ADD(2.45)
Miscellaneous Flow
DELETE(2.065) ADD(2.45)
Total Flow
DELETE(2.1314) ADD(2.5294)

11. Page 78, Outfall 1041 MGD Column Plant Washdown DELETE(0.003) ADD(0.0003) OCPSF Flow DELETE(0.018) (0.0153) Total Flow DELETE(0.0711) ADD(0.0684)

12. Page 83, Outfall 1051 MGD Column Boiler Blowdown DELETE(0.0002) ADD(0.0004) Miscellaneous Flow DELETE(0.0506) ADD(0.0508) Total Flow DELETE(0.1837) ADD(0.1839)

COMMENTS ON ANALYTICAL AND SAMPLING FREQUENCY REQUIREMENTS

1. Page1 of Part II shows an MQL of 100 ug / I for Chlorine (Total Residual). Dow uses an ion selection electrode for this analysis (40 CFR 136.3, Table 1A, Note 1B.) which has an MQL of 200 uq / I. This is an EPA approval method and even with this higher MQL compliance can still be easily determined.

PAGE 1

Revised Permit Limitations Page 1-44

PERMIT NO.LA0003301 RESPONSE TO COMMENTS TEXT

- 6. In Part III section 5.a. of the draft permit under Monitoring Procedures, Dow would like the approval for using in addition to the 40 CFR136 methods the following EPA SW846 methods.
 - 5030 Purge and trap analysis
 - 3510 Liquid liquid extractions by separatory funnel
 - 3520 Continuous liquid liquid extraction
 - 8260 GC/MS for volatile organics
 - 8270 GC/MS for semivolatile organics
 - 8021 GC for halogenated and aromatic compounds

RESPONSE

The request is denied. The permittee is required to use methods approved and found in 40 CFR 136. The permittee should contact the EPA laboratory in Houston, Texas, to discuss the process for obtaining approval for an alternative laboratory method.

7. The permittee has requested the following sampling requirement by added to Part II of the permit.

The permittee shall analyze daily composite samples of the facility's influent, receiving water from the Mississippi River at mile marker 210, and its effluent at final Outfall 001 once per six months for concentrations of 2,3,7,8-isomers of chlorinated dibenzo-p-dioxins and chlorinated dibenzo-furans. Results shall be reported as designated in 40 CFR 136, App, Method 1613 and submitted to Water Quality Divisions of LDEQ with the July and January Discharge Monitoring Reports.

FORM 2C APPLICATION REVISIONS

1. The permittee has submitted revised permit applications for Outfall 451, Outfall 521, Outfall 531, Outfall 1521, and Outfall 1711. In addition the permittee has requested a new outfall, Outfall 1561, be established.

RESPONSE

The final permit has been modified to incorporate the changes in the application submitted by the permittee. The calculations and revised permit limitations can be found in the Appendix of this document.

PAGE 3

OUTFALL 101 (INTERNAL)

Discharge Type: Continuous

Latitude 30°19'15"N, Longitude 91°13'45"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge process wastewater from the manufacture of chlorinated polyethylene to Outfall 001.

PARAMETER		[<u> </u>			
	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
BOD5	00310	307	819	LB/DAY	I/MONTH	24-HR COMPOSITE
TSS	.00530	1458	1663	LB/DAY	2/WEEK	24-HR COMPOSITE
NONCONVENTIONAL						
FLOW (MGD)	50050	REPORT	REPORT	MGD	CONTINUOUS	RECORDER
VOLATILE COMPOUNDS						,
ACRYLONITRILE	34215	1.2	2 97	LB/DAY	1/YEAR	GRAB
BENZENE	34030	0.73	1.71	LB/DAY	1/YEAR	GRAB
CARBON TETRACHLORIDE	32102	1.82	4.86	LB/DAY	1/YEAR	GRAB
CHLOROBENZENE	34301	1.82	4.86	LB/DAY	1/YEAR	GRAB
CHLOROETHANE	34311	1.41	3.77	LB/DAY	1/YEAR	GRAB
CHLOROFORM	32106	1.79	4.16	LB/DAY	I/WEEK	24-HR COMPOSITE
1,1-DICHLOROETHANE	34496	0.28	0.75	LB/DAY	I/YEAR	GRAB
1,2-DICHLOROETHANE	34531	2.3	7.34	LB/DAY	I/YEAR	GRAB
I,I-DICHLOROETHYLENE	34501	0.28	0.77	LB/DAY	1/YEAR	GRAB
1,2-DICHLOROPROPANE	34541	2.51	10.16	LB/DAY	1/YEAR	GRAB
1,3-DICHLOROPROPYLENE	34561	2.51	10.16	LB/DAY	J/YEAR	GRAB
ETHYLBENZENE	34371	1.82	4.86	LB/DAY	1/YEAR	GRAB
METHYL CHLORIDE	34418	1.41	3.77	LB/DAY	1/YEAR	GRAB
METHYLENE CHLORIDE	34423	0 46	2.17	LB/DAY	1/YEAR	GRAB
TETRACHLOROETHYLENE	34475	0.67	2.1	LB/DAY	I/YEAR	GRAB
TOLUENE	34010	0.36	0.95	LB/DAY	1/YEAR	GRAB
1,2-TRANS-DICHLOROETHYLENE	34546	0.32	0.84	LB/DAY	1/YEAR	GRAB
I,I,I-TRICHLOROETHANE	34506	0.28	0.75	LB/DAY	1/YEAR	GRAB
I,1,2-TRICHLOROETHANE	34511	0.41	1.62	LB/DAY	I/YEAR	GRAB
TRICHLOROETHYLENE	39180	0.33	0.88	LB/DAY	1/YEAR	GRAB
VINYL CHLORIDE	39175	1.24	2.2	LB/DAY	1/YEAR	GRAB

PART I - REQUIREMENTS FOR NPDES PERMITS

A. <u>EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</u>

OUTFALL 001(FINAL)

Discharge Type: Continuous

Latitude - 30°18'45"N; Longitude - 91°14'00"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge process, utility, stormwater, sanitary and other miscellaneous wastewaters to Mississippi River.

PARAMETER		l				
	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
pH RANGE EXCURSIONS 1/	82581	NA	0	3/	CONTINUOUS	RECORDER
pH RANGE EXCURSIONS 2/	82582	NA	446	<u>3</u> /	CONTINUOUS	RECORDER
pH 4/	00400	NA	NA	S.U.	CONTINUOUS	RECORDER
NONCONVENTIONAL						
Flow (MGD)	50050	REPORT	REPORT	MGD	CONTINUOUS	PUMP CURVE
BASE/NEUTRAL COMPOUNDS						
Hexachlorobenzene	39700	1.18	2.82	LB/DAY	I/WEEK	24-HR COMPOSITE
WHOLE EFFLUENT TOXICITY	ļ	MONTHLY	48-HR			
TESTING		AVERAGE	MINIMUM			
48-Hr. Static Renewal		MINIMUM	<u>5</u> /	QUALITY		
Pimephales promelas	TEM6C	NA	REPORT	%	1/QUARTER	24-HR COMPOSITE
Pimephales promelas	ТОМ6С	NA	REPORT	%	1/QUARTER	24-HR COMPOSITE
Daphnia pulex	TEM3D	NA	REPORT	%	1/QUARTER	24-HR COMPOSITE
Daphnia pulex	TOM3D	NA	REPORT	%	I/QUARTER	24-HR COMPOSITE

OUTFALL 251 (INTERNAL)

RESPONSE TO COMMENTS APPENDIX

Discharge Type:Intermittent

Latitude 30°19'0"N, Longitude 91°14'30"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge stormwater from Cellulose Plant to Outfall 001

	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
PARAMETER	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	I/MONTH	ESTIMATE
TOC	00680	N/A	50	MG/L	I/MONTH	GRAB
OIL & GREASE	00556	N/A	15	MG/L	1/MONTH	GRAB
		MINIMUM	MAXIMUM			
piH	00400	6	9	S.U.	1/MONTH	GRAB

1

RESPONSE TO COMMENTS APPENDIX

PAGE 4

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ACID COMPOUNDS						
2,4-DIMETHYLPHENOL	34606	0.24	0.6	LB/DAY	I/YEAR	GRAB
4,6-DINITRO-O-CRESOL	34657	1	3.54	LB/DAY	1/YEAR	GRAB
2,4-DINITROPHENOL	34616	15.44	54.9	LB/DAY	1/YEAR	GRAB
2-NITROPHENOL	34591	0 83	2.96	LB/DAY	1/YEAR	GRAB
4-NITROPHENOL	34646	2.07	7.37	LB/DAY	1/YEAR	GRAB
PHENOL	34694	0.24	0.6	LB/DAY	I/YEAR	GRAB
BASE/NEUTRAL COMPOUNDS						
ACENAPHTHENE	34205	0.24		LB/DAY	1/YEAR	GRAB
ACENAPHTHYLENE	34200	0.24	0.6	LB/DAY	1/YEAR	GRAB
ANTHRACENE	34220	0.24		LB/DAY	i/YEAR	GRAB
BENZO(A)ANTHRACENE	34526	0.24		LB/DAY	I/YEAR	GRAB
BENZO(A)PYRENE	34247	0.26	0.61	LB/DAY	I/YEAR	GRAB
3,4-BENZOFLUORANTHENE	34230	0.26	0.61	LB/DAY	1/YEAR	GRAB
BENZO(K)FLUORANTHENE	34242	0.24	0.6	LB/DAY	I/YEAR	GRAB
BIS(2-ETHYLHEXYL)PHTHALATE	39100	1.22	3.3	LB/DAY	I/YEAR	GRAB
CHRYSENE	34320	0.24	0.6	LB/DAY	1/YEAR	GRAB
1,2-DICHLOROBENZENE	34536	2.51	10.16	LB/DAY	1/YEAR	GRAB
1,3-DICHLOROBENZENE	34566	1.82	4.86	LB/DAY	1/YEAR	GRAB
1,4-DICHLOROBENZENE	34571	1.82	4.86	LB/DAY	1/YEAR	GRAB
DIETHYL PHTHALATE	34336	0.59	1.45	LB/DAY	I/YEAR	GRAB
DIMETHYL PHTHALATE	34341	0.24	0.6	LB/DAY	I/YEAR	GRAB
DI-N-BUTYL PHTHALATE	39110	0 26	0.55	LB/DAY	1/YEAR	GRAB
FLUORANTHENE	34376	0 28	0.69	LB/DAY	I/YEAR	GRAB
FLUORENE	34381	0.24	0.6	LB/DAY	I/YEAR	GRAB
HEXACHLOROBENZENE	39700	1.18	2.82	LB/DAY	1/YEAR	GRAB
HEXACHLOROBUTADIENE	34391	1.82	4.86	LB/DAY	I/YEAR	GRAB
HEXACHLOROETHANE	34396	2,51	10.16	LB/DAY	1/YEAR	GRAB
NAPHTHALENE	34696	0.24	0.6	LB/DAY	1/YEAR	GRAB
NITROBENZENE	34447	28.62	81.9	LB/DAY	I/YEAR	GRAB
PHENANTHRENE	34461	0,24	0.6	LB/DAY	1/YEAR	GRAB
PYRENE	344 69	0.26	0.61	LB/DAY	1/YEAR	GRAB
1,2,4-TRICHLOROBENZENE	34551	2.51	10.16	LB/DAY	I/YEAR	GRAB

PAGE 7

OUTFALL 3331 (INTERNAL)

Discharge Type: Intermittent

Latitude 30°19'0"N, Longitude 91°14'0"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge air compressor overflow, car wash water, and stormwater from Chlorine Plant to Outfall 001

Such discharges shall be limited and monitored by the permittee as specified below:

	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
PARAMETER	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	I/MONTH	ESTIMATE
TOC	00680	N/A	50	MG/L	I/MONTH	GRAB
OIL & GREASE	00556	N/A	15	MG/L	I/MONTH	GRAB
		MINIMUM	MAXIMUM			
рH	00400	6	9	S.U.	I/MONTH	GRAB

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

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RESPONSE TO COMMENTS APPENDIX

PAGE 6

OUTFALL 3101 (INTERNAL)

Discharge Type: Intermittent

Latitude30°19'0"N, Longitude 91°14'15"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge stormwater from Chlor Alkali Plant to Outfall 001

	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
PARAMETER	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	I/MONTH	ESTIMATE
TOC	00680	N/A	50	MG/L	1/MONTH	GRAB
OIL & GREASE	00556	N/A	15	MG/L	I/MONTH	GRAB
		MINIMUM	MAXIMUM			
рН	00400	6	9	S.U.	I/MONTH	GRAB

PAGE 9

OUTFALL 3361 (INTERNAL)

Discharge Type: Intermittent

Latitude 30°19'0"N, Longitude 91°14'0"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge stormwater from Chlorine Plant to Outfall 001

	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
PARAMETER	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	I/MONTH	ESTIMATE
TOC	00680	N/A	50	MG/L	1/MONTH	GRAB
OIL & GREASE	00556	N/A	15	MG/L	I/MONTH	GRAB
		MINIMUM	MAXIMUM	·		
рH	00400	6	9	S.U.	I/MONTH	GRAB

PAGE 8

OUTFALL 3351 (INTERNAL)

Discharge Type: Intermittent

Latitude 30°19'0"N, Longitude 91°14'0"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge stormwater from Chlorine Plant to Outfall 001

	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
PARAMETER	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	I/MONTH	ESTIMATE
TOC	00680	N/A	50	MG/L	I/MONTH	GRAB
OIL & GREASE	00556	N/A	15	MG/L	I/MONTH	GRAB
		MINIMUM	MAXIMUM			
рH	00400	6	9	S.U.	I/MONTH	GRAB

PAGE 11

PAGE 10

OUTFALL 451 (INTERNAL)

Discharge Type: Continuous

Latitude 30°18'45"N, Longitude 91°14'14"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge once-through noncontact cooling water and lab drains, noncontact stormwater, throx scrubber water, and cooling tower blowdown to Outfall 001.

PARAMETER						
	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	1/DAY	ESTIMATE
TOC	00680	N/A	50	MG/L	1/MONTH	GRAB
OIL & GREASE	00556	N/A	15	MG/L	1/MONTH	GRAB
1,2 DICHLOROPROPANE	34541	N/A	0.794	MG/L	I/DAY	GRAB

PAGE 13

OUTFALL 481 (INTERNAL)

Discharge Type: Continuous

Latitude 30°18'45"N, Longitude 91°14'14"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge maintenance water and stormwater to Outfall 001.

рН	00400	6	9	S.U.	1/MONTH	GRAB
		MINIMUM	MAXIMUM			
OIL & GREASE	00556	N/A	15	MG/L	1/MONTH	GRAB
TOC	00680	N/A	50	MG/L	1/MONTH	GRAB
FLOW	50050	REPORT	REPORT	MGD	1/MONTH	ESTIMATE
	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
PARAMETER	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE

PAGE 15

OUTFALL 6201 (INTERNAL)

Discharge Type: Intermittent

Latitude 30°18'45"N, Longitude 91°14'14"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge clarified noncontact river water to Outfall 001.

Such discharges shall be limited and monitored by the permittee as specified below:

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

PARAMETER	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	1/MONTH	ESTIMATE
тос	00680	N/A	55	MG/L	1/MONTH	GRAB
		MINIMUM	MAXIMUM			
pH	00400	6	9	S.U.	1/MONTH	GRAB

PAGE 14

OUTFALL 491 (INTERNAL)

Discharge Type: Continuous

Latitude 30°18'45"N, Longitude 91°14'14"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge stormwater to Outfall 001.

PARAMETER	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	I/MONTH	ESTIMATE
TOC	00680	N/A	55	MG/L	I/MONTH	GRAB
OIL & GREASE	00556	N/A	15	MG/L	I/MONTH	GRAB
		MINIMUM	MAXIMUM			<u> </u>
pH	00400	6	9	S.U.	1/MONTH	GRAB

PAGE 17

RESPONSE TO COMMENTS APPENDIX

OUTFALL 7401 (INTERNAL)

Discharge Type: Intermittent

Latitude 30°18'45"N, Longitude 91°14'14"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge clarified noncontact river water to Outfall 001.

Such discharges shall be limited and monitored by the permittee as specified below:

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

PARAMETER	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	1/MONTH	ESTIMATE
тос	00680	N/A	55	MG/L	I/MONTH	GRAB
		MINIMUM	MAXIMUM			
pH	00400	6	9	S.U.	IMONTH	GRAB

RESPONSE TO COMMENTS APPENDIX

OUTFALL 531 (INTERNAL)

Discharge Type: Continuous

Latitude 30°19'0"N, Longitude 91"14'0"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge process wastewater and once through cooling water from the manufacture of chlorinated solvents to Outfall 001.

PARAMETER						
	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
BOD5	00310	456	1217	LB/DAY	I/MONTH	GRAB
TSS .	00530	767	2485	LB/DAY	1/MONTH	GRAB
NONCONVENTIONAL						
FLOW (MGD)	50050	REPORT	REPORT	MGD	CONTINUOUS	RECORD
VOLATILE COMPOUNDS						
ACRYLONITRILE	34215	1.4	3.47	LB/DAY	I/YEAR	GRAB
BENZENE	34030	0.85	2	LB/DAY	I/WEEK	24-HR COMPOSITE
CARBON TETRACHLORIDE	32102	2.12	5.68	LB/DAY	1/WEEK	24-HR COMPOSITE
CHLOROBENZENE	34301	2.12	5 68	LB/DAY	I/WEEK	24-HR COMPOSITE
CHLOROETHANE	34311	1.64	4,41	LB/DAY	1/WEEK	24-HR COMPOSITE
CHLOROFORM	32106	1.66	4 86	LB/DAY	I/WEEK	24-HR COMPOSITE
1,1-DICHLOROETHANE	34496	0.33	0.88	LB/DAY	I/WEEK ·	24-HR COMPOSITE
1,2-DICHLOROETHANE	34531	2.69	8.58	LB/DAY	I/WEEK	24-HR COMPOSITE
1,1-DICHLOROETHYLENE	34501	0.33	0.9	LB/DAY	1/WEEK	24-HR COMPOSITE
1,2-DICHLOROPROPANE	34541	2.93	11.87	LB/DAY	1/WEEK	24-HR COMPOSITE
1,3-DICHLOROPROPYLENE	34561	2.93	11.87	LB/DAY	I/WEEK	24-HR COMPOSITE
ETHYLBENZENE	34371	2.12	5.68	LB/DAY	I/WEEK	24-HR COMPOSITE
METHYL CHLORIDE	34418	1.64	4 41	LB/DAY	I/WEEK	24-HR COMPOSITE
METHYLENE CHLORIDE	34423	0.54	2.54	LB/DAY	I/WEEK	24-HR COMPOSITE
TETRACHLOROETHYLENE	34475	0.78	2.45	LB/DAY	1/WEEK	24-HR COMPOSITE
TOLUENE	34010	0.42	1.11	LB/DAY	I/WEEK	24-HR COMPOSITE
1,2-TRANS-DICHLOROETHYLENE	34546	0.37	0.99	LB/DAY	I/WEEK	24-HR COMPOSITE
1,1,1-TRICHLOROETHANE	34506	0.33	0.88	LB/DAY	1/WEEK	24-HR COMPOSITE
1,1,2-TRICHLOROETHANE	34511	0.48	1.9	LB/DAY	I/WEEK	24-HR COMPOSITE
TRICHLOROETHYLENE	39180	0.39	1.03	LB/DAY	1/WEEK	24-HR COMPOSITE

RESPONSE TO COMMENTS APPENDIX

OUTFALL 521 (INTERNAL)

Discharge Type: Continuous

Latitude 30°19'0"N, Longitude 91"14'0"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge process wastewater and once through cooling water from the manufacture of chlorinated solvents to Outfall 001.

PARAMETER	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
NONCONVENTIONAL						
FLOW	50050	REPORT	REPORT	MGD	CONTINUOUS	RECORD
VOLATILE COMPOUNDS					_	<u> </u>
1,2 DICHLOROETHANE	34531	N/A	574	UG/L	I/DAY	GRAB
TETRACHLOROETHYLENE	34475	N/A	164	UG/L	1/DAY	GRAB

PAGE 21

OUTFALL 541 (INTERNAL)

Discharge Type: Continuous

Latitude 30°19'0"N, Longitude 91"14'0"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge HCL Scrubber Effluent to Outfall 001.

PARAMETER	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
NONCONVENTIONAL						
FLOW	50050	REPORT	REPORT	MGD	1/DAY	ESTIMATE

RESPONSE TO COMMENTS APPENDIX

VINYL CHLORIDE	39175	1.45	2.57	LB/DAY	1/WEEK	24-HR COMPOSITE
ACID COMPOUNDS						
2,4-DIMETHYLPHENOL	34606	0.28	0.7	LB/DAY	1/YEAR	GRAB
4,6-DINITRO-O-CRESOL	34657	1.17	4.14	LB/DAY	1/YEAR	GRAB
2,4-DINITROPHENOL	34616	18.04	64.13	LB/DAY	I/YEAR	GRAB
2-NITROPHENOL	34591	0.97	3 45	LB/DAY	I/YEAR	GRAB
4-NITROPHENOL	34646	2.42	8 61	LB/DAY	I/YEAR	GRAB
PHENOL	34694	0.28	0.7	LB/DAY	1/YEAR	GRAB
BASE/NEUTRAL COMPOUNDS						
ACENAPHTHENE	34205	0 28	0.7	LB/DAY	I/YEAR	GRAB
ACENAPHTHYLENE	34200	0.28	0.7	LB/DAY	I/YEAR	GRAB
ANTHRACENE	34220	0.28	07	LB/DAY	I/YEAR	GRAB
BENZO(A)ANTHRACENE	34526	0.28	0.7	LB/DAY	1/YEAR	GRAB
BENZO(A)PYRENE	34247	0.3	0.72	LB/DAY	1/YEAR	GRAB
3,4-BENZOFLUORANTHENE	34230	0.3	0.72	LB/DAY	1/YEAR	GRAB
BENZO(K)FLUORANTHENE	34242	0.28	0.7	LB/DAY	I/YEAR	GRAB
BIS(2-ETHYLHEXYL)PHTHALATE	39100	1.42	3.86	LB/DAY	1/YEAR	GRAB
CHRYSENE	34320	0.28	0.7	LB/DAY	I/YEAR	GRAB
1,2-DICHLOROBENZENE	34536	2.93	11.87	LB/DAY	I/YEAR	GRAB
1,3-DICHLOROBENZENE	34566	2.12	5.68	LB/DAY	I/YEAR	GRAB
1,4-DICHLOROBENZENE	34571	2.12	5.68	LB/DAY	I/YEAR	GRAB
DIETHYL PHTHALATE	34336	0.69	1.69	LB/DAY	I/YEAR	GRAB
DIMETHYL PHTHALATE	34341	0.28	0.7	LB/DAY	1/YEAR	GRAB
DI-N-BUTYL PHTHALATE	39110	0.3	0.64	LB/DAY	I/YEAR	GRAB
FLUORANTHENE	34376	0.33	0.81	LB/DAY	I/YEAR	GRAB
FLUORENE	34381	0.28	0.7	LB/DAY	1/YEAR	GRAB
HEXACHLOROBENZENE	39700	1.18	2.82	LB/DAY	I/YEAR	GRAB
HEXACHLOROBUTADIENE	34391	2.12	5.68	LB/DAY	I/YEAR	GRAB
HEXACHLOROETHANE	34396	2 93	11.87	LB/DAY	I/YEAR	GRAB
NAPHTHALENE	34696	0 28	0.7	LB/DAY	1/YEAR	GRAB
NITROBENZENE	34447	33.43	95.68	LB/DAY	1/YEAR	GRAB
PHENANTHRENE	34461	0.28	0.7	LB/DAY	I/YEAR	GRAB
PYRENE	34469	0.3	0.72	LB/DAY	I/YEAR	GRAB
1,2,4-TRICHLOROBENZENE	34551	2,93	11.87	LB/DAY	1/YEAR	GRAB

OUTFALL 741 (INTERNAL)

Discharge Type: Continuous

Latitude 30°19'24.6"N, Longitude 91°14'16.7"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge plant washdown, maintenance water, pump seal purges, process area stormwater, and condensate to Outfall 001.

PARAMETER	1	<u> </u>			T	<u> </u>
7744 17421 214	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
CONVENTIONAL			MAXIMUM	LINITE	FREQUENCY	TYPE
BODS	00310	721		LB/DAY		GRAB
TSS	00530	1063		LB/DAY		GRAB
	00330	1000	3472	LUDAI	17 WEEK	UKAB
NONCONVENTIONAL						
FLOW (MGD)	50050	REPORT	REPORT	MGD	CONTINUOUS	PECOPIN
					COMMISSION	ALCOND
VOLATILE COMPOUNDS		······································				
ACRYLONITRILE	34215	2.17	5.36	LB/DAY	I/YEAR	GRAB
BENZENE	34030	1.32	3.1	LB/DAY	I/WEEK	24-HR COMPOSITE
CARBON TETRACHLORIDE	32102	3.28	8.78	LB/DAY	I/YEAR	GRAB
CHLOROBENZENE	34301	3.28	8.78	LB/DAY	I/YEAR	GRAB
CHLOROETHANE	34311	2,54	6.82	LB/DAY	1/YEAR	GRAB
CHLOROFORM	32106	2.56	7.51	LB/DAY	1/YEAR	GRAB
1,1-DICHLOROETHANE	34496	0.51	1.36	LB/DAY	I/YEAR	GRAB
1,2-DICHLOROETHANE	34531	4,16	13.26	LB/DAY	I/YEAR	GRAB
I,I-DICHLOROETHYLENE	34501	0.51	1.39	LB/DAY	I/YEAR	GRAB
1,2-DICHLOROPROPANE	34541	4.53	18.34	LB/DAY	1/YEAR	GRAB
1,3-DICHLOROPROPYLENE	34561	4.53	18.34	LB/DAY	1/YEAR	GRAB
ETHYLBENZENE	34371	3.28	8.78	LB/DAY	1/WEEK	24-HR COMPOSITE
METHYL CHLORIDE	34418	2.54	6.82	LB/DAY	I/YEAR	GRAB
METHYLENE CHLORIDE	34423	0.83	3.93	LB/DAY	I/YEAR	GRAB
TETRACHLOROETHYLENE	34475	1,2	3.79	LB/DAY	1/YEAR	GRAB
TOLUENE	34010	0.65	1.71	LB/DAY	1/WEEK	24-HR COMPOSITE
1,2-TRANS-DICHLOROETHYLENE	34546	0.58	1.52	LB/DAY	1/YEAR	GRAB
1,1,1-TRICHLOROETHANE	34506	0.51	1.36	LB/DAY		GRAB
1,1,2-TRICHLOROETHANE	34511	0.74	2.93	LB/DAY		GRAB
TRICHLOROETHYLENE	39180	0.6	1.59	LB/DAY	1/YEAR	GRAB
VINYL CHLORIDE	39175	2.24	3.97	LB/DAY		GRAB

PAGE 22

OUTFALL 2921 (INTERNAL)

Discharge Type: Intermittent

Latitude 30°19'0"N, Longitude 91"14'0"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge stormwater and maintenance water from Block 5 Tankfarm to Outfall 001.

PARAMETER	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	I/MONTH	ESTIMATE
TOC	00680	N/A	50	MG/L	I/MONTH	GRAB
OIL & GREASE	00556	N/A	15	MG/L	I/MONTH	GRAB
		MINIMUM	MAXIMUM			
рН	00400	6	9	S.U.	I/MONTH	GRAB

PAGE 25

OUTFALL 3911 (INTERNAL)

Discharge Type: Intermittent

Latitude 30°19'30"N, Longitude 91°14'0"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge stormwater from Block 39 to Outfall 001

PARAMETER	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	1/MONTH	ESTIMATE
TOC	00680	N/A	50	MG/L	1/MONTH	GRAB
OIL & GREASE	00556	N/A	1.5	MG/L	1/MONTH	GRAB
		MINIMUM	MAXIMUM			`
pH	00400	6	9	S.U.	I/MONTH	GRAB

ACID COMPOUNDS						
2,4-DIMETHYLPHENOL	34606	0.44	1.09	LB/DAY	I/YEAR	GRAB
4,6-DINITRO-O-CRESOL	34657	1.8	6,4	LB/DAY	I/YEAR	GRAB
2,4-DINITROPHENOL	34616	27.88	99.13	LB/DAY	1/YEAR	GRAB
2-NITROPHENOL	34591	1.5		LB/DAY	I/YEAR	GRAB
4-NITROPHENOL	34646	3.74	13.31	LB/DAY	I/YEAR	GRAB
PHENOL	34694	0.44	1.09	LB/DAY	1/YEAR	GRAB
1111102						
BASE/NEUTRAL COMPOUNDS						
ACENAPHTHENE	34205	0.44	1 09	LB/DAY	I/YEAR	GRAB
ACENAPHTHYLENE	34200	0.44	1.09	LB/DAY	1/YEAR	GRAB
ANTHRACENE	34220	0.44	1.09	LB/DAY	1/YEAR	GRAB
BENZO(A)ANTHRACENE	34526	0.44		LB/DAY	1/YEAR	GRAB
BENZO(A)PYRENE	34247	0.46	1.11	LB/DAY	I/YEAR	GRAB
3,4-BENZOFLUORANTHENE	34230	0.46	1,11	LB/DAY	1/YEAR	GRAB
BENZO(K)FLUORANTHENE	34242	0,44	1.09	LB/DAY	1/YEAR	GRAB
BIS(2-ETHYLHEXYL)PHTHALATE	39100	2.19	5.96	LB/DAY	I/YEAR	GRAB
CHRYSENE	34320	0.44	1.09	LB/DAY	I/YEAR	GRAB
1,2-DICHLOROBENZENE	34536	4.53	18 34	LB/DAY	1/YEAR	GRAB
1.3-DICHLOROBENZENE	34566	3.28	8 78	LB/DAY	1/YEAR	GRAB
1.4-DICHLOROBENZENE	34571	3.28	8.78	LB/DAY	1/YEAR	GRAB
DIETHYL PHTHALATE	34336	1.06	2.61	LB/DAY	1/YEAR	GRAB
DIMETHYL PHTHALATE	34341	0 44	1 09	LB/DAY	I/YEAR	GRAB
DI-N-BUTYL PHTHALATE	39110	0.46	0.99	LB/DAY	J/YEAR	GRAB
FLUORANTHENE	34376	0.51	1.25	LB/DAY	1/YEAR	GRAB
FLUORENE	34381	0.44	1.09	LB/DAY	I/YEAR	GRAB
HEXACHLOROBENZENE	39700	1.18	2,82	LB/DAY	1/YEAR	GRAB
HEXACHLOROBUTADIENE	34391	3.28	8.78	LB/DAY	1/YEAR	GRAB
HEXACHLOROETHANE	34396	4.53	18 34	LB/DAY	1/YEAR	GRAB
NAPHTHALENE	34696	0,44	1.09	LB/DAY	1/YEAR	GRAB
NITROBENZENE	34447	51.68	147.9	LB/DAY	I/YEAR	GRAB
PHENANTHRENE	34461	0.44	1.09	LB/DAY	I/YEAR	GRAB
PYRENE	34469	0.46	1.11	LB/DAY	1/YEAR	GRAB
1,2,4-TRICHLOROBENZENE	34551	4.53	18.34	LB/DAY	1/YEAR	GRAB

PAGE 27

		T	T	I	T	T
ACID COMPOUNDS	 			 		
2,4-DIMETHYLPHENOL	34606	0.16	0.39	LB/DAY	1/YEAR	GRAB
4,6-DINITRO-O-CRESOL	34657	0.65	2,29	LB/DAY	1/YEAR	GRAB
2,4-DINITROPHENOL	34616	10	35.54	LB/DAY	I/YEAR	GRAB
2-NITROPHENOL	34591	0.54	1.91	LB/DAY	1/YEAR	GRAB
4-NITROPHENOL	34646	1.34	4.77	LB/DAY	I/YEAR	GRAB
PHENOL	34694	0.16	0.39	LB/DAY	1/YEAR	GRAB
BASE/NEUTRAL COMPOUNDS			<u> </u>			
ACENAPHTHENE	34205	0.16	0.39	LB/DAY	1/YEAR	GRAB
ACENAPHTHYLENE	34200	0.16	0.39	LB/DAY	I/YEAR	GRAB
ANTHRACENE	34220	0.16	0.39	LB/DAY	1/YEAR	GRAB
BENZO(A)ANTHRACENE	34526	0.16	0.39	LB/DAY	1/YEAR	GRAB
BENZO(A)PYRENE	34247	0.17	0.4	LB/DAY	I/YEAR	GRAB
3,4-BENZOFLUORANTHENE	34230	0.17	0.4	LB/DAY	I/YEAR	GRAB
BENZO(K)FLUORANTHENE	34242	0.16	0.39	LB/DAY	I/YEAR	GRAB
BIS(2-ETHYLHEXYL)PHTHALATE	39100	0.79	2.14	LB/DAY	I/YEAR	GRAB
CHRYSENE	34320	0.16	0.39	LB/DAY	1/YEAR	GRAB
1,2-DICHLOROBENZENE	34536	1.62	6.58	LB/DAY	1/YEAR	GRAB
1,3-DICHLOROBENZENE	34566	1.18	3.15	LB/DAY	I/YEAR	GRAB
1,4-DICHLOROBENZENE	34571	1.18	3.15	LB/DAY	I/YEAR	GRAB
DIETHYL PHTHALATE	34336	0.38	0.94	LB/DAY	1/YEAR	GRAB
DIMETHYL PHTHALATE	34341	0.16	0.39	LB/DAY	I/YEAR	GRAB
DI-N-BUTYL PHTHALATE	39110	0.17	0.36	LB/DAY	I/YEAR	GRAB
FLUORANTHENE	34376	0.18	0.45	LB/DAY	i/YEAR	GRAB
FLUORENE	34381	0.16	0.39	LB/DAY	1/YEAR	GRAB
HEXACHLOROBENZENE	39700	1.18	2.82	LB/DAY	1/YEAR	GRAB
HEXACHLOROBUTADIENE	34391	1.18	3.15	LB/DAY	1/YEAR	GRAB
HEXACHLOROETHANE	34396	1.62	6.58	LB/DAY	I/YEAR	GRAB
NAPHTHALENE	34696	0.16	0.39	LB/DAY	1/YEAR	GRAB
NITROBENZENE	34447	18.53	53.02	LB/DAY	1/YEAR	GRAB
PHENANTHRENE	34461	0.16	0.39	LB/DAY	I/YEAR	GRAB
PYRENE	34469	0.17	04	LB/DAY	I/YEAR	GRAB
1,2,4-TRICHLOROBENZENE	34551	1.62	6.58	LB/DAY	1/YEAR	GRAB

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OUTFALL 911 (INTERNAL)

Discharge Type: Continuous

Latitude 30°19'0"N, Longitude 91°13'45"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge once through cooling water and process wastewater from the manufacture of high density polyethylene to Outfall 001.

PARAMETER						
	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
BOD5	00310	199	530	LB/DAY	I/MONTH	GRAB
TSS	00530	331	1077	LB/DAY	I/MONTH	GRAB
NONCONVENTIONAL						
FLOW (MGD)	50050	REPORT	REPORT	MGD	1/DAY	ESTIMATE
VOLATILE COMPOUNDS						
ACRYLONITRILE	34215	0,78		LB/DAY	I/YEAR	GRAB
BENZENE	34030	0 47		LB/DAY	I/YEAR	GRAB
CARBON TETRACHLORIDE	32102	1.18		LB/DAY	I/YEAR	GRAB
CHLOROBENZENE	34301	1.18	3.15	LB/DAY	I/YEAR	GRAB
CHLOROETHANE	34311	0.91	2.44	LB/DAY	I/YEAR	GRAB
CHLOROFORM	32106	0.92	2.69	LB/DAY	1/YEAR	GRAB
1,1-DICHLOROETHANE	34496	0.18	0.49	LB/DAY	I/YEAR	GRAB
1,2-DICHLOROETHANE	34531	1.49	4.75	LB/DAY	1/YEAR	GRAB
I,I-DICHLOROETHYLENE	34501	0,18	0,5	LB/DAY	1/YEAR	GRAB
1,2-DICHLOROPROPANE	34541	1.62	6.58	LB/DAY	I/YEAR	GRAB
1,3-DICHLOROPROPYLENE	34561	1.62	6.58	LB/DAY	I/YEAR	GRAB
ETHYLBENZENE	34371	1,18	3.15	LB/DAY	1/YEAR	GRAB
METHYL CHLORIDE	34418	0.91	2.44	LB/DAY	I/YEAR	GRAB
METHYLENE CHLORIDE	34423	0.3	1.41	LB/DAY	1/YEAR	GRAB
TETRACHLOROETHYLENE	34475	0.43	1.36	LB/DAY	1/YEAR	GRAB
TOLUENE	34010	0.23	0.61	LB/DAY	I/YEAR	GRAB
1,2-TRANS-DICHLOROETHYLENE	34546	0.21	0.55	LB/DAY	I/YEAR	GRAB
1,1,1-TRICHLOROETHANE	34506	0.18	0 49	LB/DAY	I/YEAR	GRAB
1,1,2-TRICHLOROETHANE	34511	0.27	1.05	LB/DAY	I/YEAR	GRAB
TRICHLOROETHYLENE	39180	0.22	0.57	LB/DAY	1/YEAR	GRAB
VINYL CHLORIDE	39175	0.8	1.42	LB/DAY	I/YEAR	GRAB

PAGE 29

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ACID COMPOUNDS	+			 		
2,4-DIMETHYLPHENOL	34606	19	47	UG/L	I/YEAR	GRAB
4,6-DINITRO-O-CRESOL	34657	78	·	-	I/YEAR	GRAB
2,4-DINITROPHENOL	34616	1207		UG/L	I/YEAR	GRAB
2-NITROPHENOL	34591	65		 	1/YEAR	GRAB
4-NITROPHENOL	34646	162		UG/L	I/YEAR	GRAB
PHENOL	34694	19	47	UG/L	I/YEAR	GRAB
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BASE/NEUTRAL COMPOUNDS						
ACENAPHTHENE	34205	19	47	UG/L	I/YEAR	GRAB
ACENAPHTHYLENE	34200	19	47	UG/L	1/YEAR	GRAB
ANTHRACENE	34220	19	47	UG/L	I/YEAR	GRAB
BENZO(A)ANTHRACENE	34526	19	47	UG/L	I/YEAR	GRAB
BENZO(A)PYRENE	34247	20	48	UG/L	I/YEAR	GRAB
3,4-BENZOFLUORANTHENE	34230	20	48	UG/L	I/YEAR	GRAB
BENZO(K)FLUORANTHENE	34242	19	47	UG/L	I/YEAR	GRAB
BIS(2-ETHYLHEXYL)PHTHALATE	39100	95	258	UG/L	1/YEAR	GRAB
CHRYSENE	34320	19	47	UG/L	I/YEAR	GRAB
1,2-DICHLOROBENZENE	34536	196	794	UG/L	1/YEAR	GRAB
I.3-DICHLOROBENZENE	34566	142	380	UG/L	1/YEAR	GRAB
1,4-DICHLOROBENZENE	34571	142	380	UG/L	I/YEAR	GRAB
DIETHYL PHTHALATE	34336	46	113	UG/L	I/YEAR	GRAB
DIMETHYL PHTHALATE	34341	19	47	UG/L	1/YEAR	GRAB
DI-N-BUTYL PHTHALATE	39110	20	43	UG/L	I/YEAR	GRAB
FLUORANTHENE	34376	22	54	UG/L	I/YEAR	GRAB
FLUORENE	34381	19	47	UG/L	1/YEAR	GRAB
HEXACHLOROBENZENE	39700	196	794	UG/L	I/YEAR	GRAB
HEXACHLOROBUTADIENE	34391	142	380	UG/L	1/YEAR	GRAB
HEXACHLOROETHANE	34396	196	794	UG/L	1/YEAR	GRAB
NAPHTHALENE	34696	19	47	UG/L	1/YEAR	GRAB
NITROBENZENE	34447	2237	6402	UG/L	1/YEAR	GRAB
PHENANTHRENE	34461	19	47	UG/L	I/YEAR	GRAB
PYRENE	344 69	20	48	UG/L	I/YEAR	GRAB
1,2,4-TRICHLOROBENZENE	34551	196	794	UG/L	I/YEAR	GRAB

OUTFALL 1521 (INTERNAL)

Discharge Type: Intermittent

Latitude 30°19'15"N, Longitude 91°14'15"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge process wastewater and cooling tower blowdown from the manufacture of chlorinated methanes to Outfall 001.

PARAMETER						
	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
BOD5	00310	34	92	MG/L	I/MONTH	GRAB
TSS	00530	49	159	MG/L	I/MONTH	GRAB
NONCONVENTIONAL						
FLOW (MGD)	50050	REPORT	REPORT	MGD	1/DAY	ESTIMATE
VOLATILE COMPOUNDS						
ACRYLONITRILE	34215	94	232	UG/L	1/YEAR	GRAB
BENZENE	34030	57	134	UG/L	I/YEAR	GRAB
CARBON TETRACHLORIDE	32102	[42	380	UG/L	I/YEAR	GRAB
CHLOROBENZENE	34301	142	380	UG/L	1/YEAR	GRAB
CHLOROETHANE	34311	110	295	UG/L	1/YEAR	GRAB
CHLOROFORM	32106	111	325	UG/L	I/YEAR	GRAB
1,1-DICHLOROETHANE	34496	22	59	UG/L	I/YEAR	GRAB
1,2-DICHLOROETHANE	34531	180	574	UG/L	1/YEAR	GRAB
!,1-DICHLOROETHYLENE	34501	22	60	UG/L	I/YEAR	GRAB
1,2-DICHLOROPROPANE	34541	196	794	UG/L	I/YEAR	GRAB
1,3-DICHLOROPROPYLENE	34561	196	794	UG/L	I/YEAR	GRAB
ETHYLBENZENE	34371	142	380	UG/L	I/YEAR	GRAB
METHYL CHLORIDE	34418	110	295	UG/L	1/YEAR	GRAB
METHYLENE CHLORIDE	34423	36	170	UG/L	1/YEAR	ĢRAB
TETRACHLOROETHYLENE	34475	52	164	UG/L	1/YEAR	GRAB
TOLUENE	34010	28	74	UG/L	I/YEAR	GRAB
1,2-TRANS-DICHLOROETHYLENE	34546	25	66	UG/L	I/YEAR	GRAB
I,I,I-TRICHLOROETHANE	34506	22	59	UG/L	1/YEAR	GRAB
1,1,2-TRICHLOROETHANE	34511	32	127	UG/L	1/YEAR	GRAB
TRICHLOROETHYLENE	39180	26	69	UG/L	1/YEAR	- GRAB
VINYL CHLORIDE	39175	97	172	UG/L	1/YEAR	GRAB

PAGE 31

ACID COMPOUNDS	1	T i		T		
2,4-DIMETHYLPHENOL	34606	0.01	0,03	LB/DAY	I/YEAR	GRAB
4,6-DINITRO-O-CRESOL	34657	0.05	0.18	LB/DAY	I/YEAR	GRAB
2,4-DINITROPHENOL	34616	0.81	2.86	LB/DAY	1/YEAR	GRAB
2-NITROPHENOL	34591	0.04	0.15	LB/DAY	I/YEAR	GRAB
4-NITROPHENOL	34646	0.11	0.38	LB/DAY	I/YEAR	GRAB
PHENOL	34694	0.01	0.03	LB/DAY	I/YEAR	GRAB
BASE/NEUTRAL COMPOUNDS					· · · ·	
ACENAPHTHENE	34205	0.01	0.03	LB/DAY	1/YEAR	GRAB
ACENAPHTHYLENE	34200	0.01	0.03	LB/DAY	1/YEAR	GRAB
ANTHRACENE	34220	0.01	0.03	LB/DAY	I/YEAR	GRAB
BENZO(A)ANTHRACENE	34526	10.0	0.03	LB/DAY	I/YEAR	GRAB
BENZO(A)PYRENE	34247	0.01	0.03	LB/DAY	1/YEAR	GRAB
1,4-BENZOFLUORANTHENE	34230	10.0	0.03	LB/DAY	1/YEAR	GRAB
BENZO(K)FLUORANTHENE	34242	0.01	0.03	LB/DAY	I/YEAR	GRAB
BIS(2-ETHYLHEXYL)PHTHALATI	39100	0.06	0.17	LB/DAY	I/YEAR	GRAB
CHRYSENE	34320	0.01	0.03	LB/DAY	I/YEAR	GRAB
,2-DICHLOROBENZENE	34536	0.13	0.53	LB/DAY	I/YEAR	GRAB
,3-DICHLOROBENZENE	34566	0.09	0.25	LB/DAY	I/YEAR	GRAB
,4-DICHLOROBENZENE	34571	0.09	0.25	LB/DAY	I/YEAR	GRAB
DIETHYL PHTHALATE	34336	0.03	0 08 1	LB/DAY	I/YEAR	GRAB
DIMETHYL PHTHALATE	34341	0.01	0.03 1	.B/DAY	I/YEAR	GRAB
DI-N-BUTYL PHTHALATE	39110	0.01	0.03	LB/DAY	I/YEAR	GRAB
LUORANTHENE	34376	0.01	0 04 1	LB/DAY	I/YEAR	GRAB
LUORENE	34381	0.01	0.03 L	.B/DAY	1/YEAR	GRAB
HEXACHLOROBENZENE	39700	0.13	0.53 L	.B/DAY	I/YEAR	GRAB
IEXACHLOROBUTADIENE	34391	0.09	0.25 L	.B/DAY	1/YEAR	GRAB
IEXACHLOROETHANE	34396	0.13	0.53 L	.B/DAY	I/YEAR	GRAB
IAPHTHALENE	34696	0.01	0.03 L	.B/DAY	1/YEAR	GRAB
IITROBENZENE	34447	1.49	4.27 L	.B/DAY	I/YEAR	GRAB
HENANTHRENE	34461	10.0	0.03 L	.B/DAY	I/YEAR	GRAB
YRENE	34469	0.01	0.03 1	.B/DAY	I/YEAR	GRAB
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OUTFALL 1531 (INTERNAL)

Discharge Type: Continuous

Latitude 30°19'15"N, Longitude 91°14'15"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge process wastewater from the manufacture of chlorinated methanes to Outfall 001.

PARAMETER	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
BOD5	00310	23	61	LB/DAY	I/MONTH	ORAB
TSS	00530	33	106	LB/DAY	I/MONTH	GRAB
NONCONVENTIONAL						
FLOW (MGD)	50050	REPORT	REPORT	MGD	CONTINUOUS	RECORD
VOLATILE COMPOUNDS						
ACRYLONITRILE	34215	0.06	0.15	LB/DAY	I/YEAR	24-HR COMPOSITE
BENZENE	34030	0.04	0.09	LB/DAY	1/WEEK	24-HR COMPOSITE
CARBON TETRACHLORIDE	32102	0.09	0.25	LB/DAY	I/WEEK	24-HR COMPOSITE
CHLOROBENZENE	34301	0.09	0.25	LB/DAY	I/WEEK	24-HR COMPOSITE
CHLOROETHANE	34311	0.07	· 0.2	LB/DAY	I/WEEK	24-HR COMPOSITE
CHLOROFORM	32106	0.07	0.22	LB/DAY	I/WEEK	24-HR COMPOSITE
1,1-DICHLOROETHANE	34496	0.01	0.04	LB/DAY	1/WEEK	24-HR COMPOSITE
1,2-DICHLOROETHANE	34531	0.12	0.38	LB/DAY	1/WEEK	24-HR COMPOSITE
I,I-DICHLOROETHYLENE	34501	0.01	0.04	LB/DAY	1/WEEK	24-HR COMPOSITE
1,2-DICHLOROPROPANE	34541	0.13	0.53	LB/DAY	I/WEEK	24-HR COMPOSITE
1,3-DICHLOROPROPYLENE	34561	0.13	0.53	LB/DAY	I/WEEK	24-HR COMPOSITE
ETHYLBENZENE	34371	0.09	0.25	LB/DAY	1/WEEK	24-HR COMPOSITE
METHYL CHLORIDE	34418	1.11	2.7	LB/DAY	I/WEEK	24-HR COMPOSITE
METHYLENE CHLORIDE	34423	0.02	0.11	LB/DAY	1/WEEK	24-HR COMPOSITE
TETRACHLOROETHYLENE	34475	0.03	0.11	LB/DAY	1/WEEK	24-HR COMPOSITE
TOLUENE	34010	0.02	0.05	LB/DAY	1/WEEK	24-HR COMPOSITE
1,2-TRANS-DICHLOROETHYLENE	34546	0.02	0.04	LB/DAY	I/WEEK	24-HR COMPOSITE
1,1,1-TRICHLOROETHANE	34506	10.0	0.04	LB/DAY	I/WEEK	24-HR COMPOSITE
1,1,2-TRICHLOROETHANE	34511	0.02	0.08	LB/DAY	I/WEEK	24-HR COMPOSITE
TRICHLOROETHYLENE	39180	0.02	0.05	LB/DAY	I/WEEK	24-HR COMPOSITE
VINYL CHLORIDE	39175	0.06	0.11	LB/DAY	1/WEEK	24-HR COMPOSITE
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PAGE 33

OUTFALL 1711 (INTERNAL)

Discharge Type: Continuous

Latitude 30°19'30"N, Longitude 91°14'45"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge process wastewater and cooling tower blowdown from Vinyl II plant to Outfall 001.

PARAMETER						
	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
BOD5	00310	914	2439	LB/DAY	1/MONTH	GRAB
TSS	00530	999	3237	LB/DAY	I/MONTH	GRAB
NONCONVENTIONAL						
FLOW (MGD)	50050	REPORT	REPORT	MGD	RECORDER	CONTINUOUS
VOLATILE COMPOUNDS						<u> </u>
ACRYLONITRILE	34215	1.75	4.31	LB/DAY	I/YEAR	GRAB
BENZENE	34030	1.06	2.49	LB/DAY	1/YEAR	GRAB
CARBON TETRACHLORIDE	32102	2.64	7.07	LB/DAY	1/YEAR	GRAB
CHLOROBENZENE	34301	2.64	7 07	LB/DAY	I/YEAR	GRAB
CHLOROETHANE	34311	2.05	5.49	LB/DAY	1/YEAR	GRAB
CHLOROFORM	32106	2.06	6.04	LB/DAY	I/WEEK	GRAB
1,1-DICHLOROETHANE	34496	0.41	1.1	LB/DAY	I/YEAR	GRAB
1,2-DICHLOROETHANE	34531	3.35	10.68	LB/DAY	I/WEEK	GRAB
I,I-DICHLOROETHYLENE	34501	0.41	1.12	LB/DAY	1/YEAR	GRAB
1,2-DICHLOROPROPANE	34541	3,65	14.77	LB/DAY	I/YEAR	GRAB
I,3-DICHLOROPROPYLENE	34561	3 65	14.77	LB/DAY	I/YEAR	GRAB
ETHYLBENZENE	34371	2.64	7.07	LB/DAY	1/YEAR	GRAB
METHYL CHLORIDE	34418	2.05	5.49	LB/DAY	1/WEEK	GRAB
METHYLENE CHLORIDE	34423	0.67	3.16	LB/DAY	1/YEAR	GRAB
TETRACHLOROETHYLENE	34475	0.97	3.05	LB/DAY	1/YEAR	GRAB
FOLUENE	34010	0.52	1.38	LB/DAY	1/YEAR	GRAB
1,2-TRANS-DICHLOROETHYLENE	34546	0.46		LB/DAY	1/YEAR	GRAB
1,1,1-TRICHLOROETHANE	34506	0.41	11	LB/DAY	1/YEAR	GRAB
,1,2-TRICHLOROETHANE	34511	0.6	2.36	LB/DAY	I/YEAR	GRAB
TRICHLOROETHYLENE	39180	0.48		LB/DAY	I/YEAR	GRAB
VINYL CHLORIDE	39175	1.8		LB/DAY	1/YEAR	GRAB

OUTFALL 1551 (INTERNAL)

Discharge Type: Intermittent

Latitude 30°19'15"N, Longitude 91°14'15"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge stormwater from Chlorinated Methanes Plant to Outfall 001.

PARAMETÉR	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	I/MONTH	ESTIMATE
TOC	00680	N/A	50	MG/L	I/MONTH	GRAB
OIL & GREASE	00556	N/A	15	MG/L	1/MONTH	GRAB
		MINIMUM	MAXIMUM			
рН	00400	6	9	S.U.	I/MONTH	GRAB

PAGE 35

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ACID COMPOUNDS						
2,4-DIMETHYLPHENOL	34606	0.35	0.87	LB/DAY	1/YEAR	GRAB '
4,6-DINITRO-O-CRESOL	34657	1.45	5.15	LB/DAY	I/YEAR	GRAB
2,4-DINITROPHENOL	34616	22.45	79 8	LB/DAY	1/YEAR	GRAB
2-NITROPHENOL	34591	1.21	4.3	LB/DAY	1/YEAR	GRAB
4-NITROPHENOL	34646	3.01	10.71	LB/DAY	I/YEAR	GRAB
PHENOL	34694	0.35	0.87	LB/DAY	I/YEAR	GRAB
BASE/NEUTRAL COMPOUNDS						
ACENAPHTHENE	34205	0.35	087	LB/DAY	I/YEAR	GRAB
ACENAPHTHYLENE	34200	0.35	0.87	LB/DAY	1/YEAR	GRAB
ANTHRACENE	34220	0.35	0.87	LB/DAY	1/YEAR	GRAB
BENZO(A)ANTHRACENE	34526	0.35	0.87	LB/DAY	I/YEAR	GRAB
BENZO(A)PYRENE	34247	0.37	0 89	LB/DAY	I/YEAR	GRAB
3,4-BENZOFLUORANTHENE	34230	0.37	0 89	LB/DAY	I/YEAR	GRAB
BENZO(K)FLUORANTHENE	34242	0.35	0.87	LB/DAY	I/YEAR	GRAB
BIS(2-ETHYLHEXYL)PHTHALATE	39100	1.77	4.8	LB/DAY	I/YEAR	GRAB
CHRYSENE	34320	0.35	0.87	LB/DAY	1/YEAR	GRAB
1,2-DICHLOROBENZENE	34536	3.65	14.77	LB/DAY	1/YEAR	GRAB
1,3-DICHLOROBENZENE	34566	2.64	7.07	LB/DAY	1/YEAR	GRAB
1,4-DICHLOROBENZENE	34571	2,64	7.07	LB/DAY	I/YEAR	GRAB
DIETHYL PHTHALATE	34336	0.86	2.1	LB/DAY	1/YEAR	GRAB
DIMETHYL PHTHALATE	34341	0.35	0.87	LB/DAY	I/YEAR	GRAB
DI-N-BUTYL PHTHALATE	39110	0.37	0.8	LB/DAY	1/YEAR	GRAB
FLUORANTHENE	34376	0.41		LB/DAY	I/YEAR	GRAB
FLUORENE	34381	0.35	0.87	LB/DAY	1/YEAR	GRAB
HEXACHLOROBENZENE	39700	1.18	2.82	LB/DAY	I/YEAR	GRAB
HEXACHLOROBUTADIENE	34391	2 64	7.07	LB/DAY	1/YEAR	GRAB
HEXACHLOROETHANE	34396	3 65	14.77	LB/DAY	1/YEAR	GRAB
NAPHTHALENE	34696	0.35	0.87	LB/DAY	1/YEAR	GRAB
NITROBENZENE	34447	41.6	119.07	LB/DAY	1/YEAR	GRAB
PHENANTHRENE	34461	0.35	0.87	LB/DAY	1/YEAR	GRAB
PYRENE	34469	0.37	0.89	LB/DAY	1/YEAR	GRAB
1,2,4-TRICHLOROBENZENE	34551	3,65	14.77	LB/DAY	1/YEAR	GRAB

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PAGE 37

OUTFALL 1831 & 1861 (INTERNAL)

Discharge Type: Intermittent

Latitude30°19'15"N, Longitude 91°14'30"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge stormwater from Dowanols/Ethanolamines to Outfall 001.

PARAMETER	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	I/MONTH	ESTIMATE
TOC	00680	N/A	50	MG/L	1/MONTH	GRAB
OIL & GREASE	00556	N/A	15	MG/L	1/MONTH	GRAB
		MINIMUM	MAXIMUM			
рН	00400	6	9	S.U.	HTMOMN	GRAB



PAGE 36

OUTFALL 1731 (INTERNAL)

Discharge Type: Intermittent

Latitude 30°19'45"N, Longitude 91°14'30"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge stormwater from Vinyl II Storage Area to Outfall 001

	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
PARAMETER	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	1/MONTH	ESTIMATE
TOC	00680	N/A	50	MG/L	I/MONTH	GRAB
OIL & GREASE	00556	N/A	15	MG/L	I/MONTH	GRAB
		MINIMUM	MAXIMUM			
pH	00400	6	9	S.U.	1/MONTH	GRAB

PAGE 39

1.1,2-TRICHLOROETHANE	34511	3.42	8.79	LB/DAY	2/WEEK	24-HR COMPOSITE
TRICHLOROETHYLENE	39180	3,42		LB/DAY		24-HR COMPOSITE
VINYL CHLORIDE	39175	16,94		LB/DAY		24-HR COMPOSITE
	1			1		2711000111001110
ACID COMPOUNDS	<u>†</u>			<u> </u>		•
2-CHLOROPHENOL	34586	5.05	15.96	LB/DAY	2/MONTH	24-HR COMPOSITE
2,4-DICHLOROPHENOL	34601	6.35	18.24	LB/DAY	2/MONTH	24-HR COMPOSITE
2,4-DIMETHYLPHENOL	34606	2,93	·····	LB/DAY	2/MONTH	24-HR COMPOSITE
4,6-DINITRO-O-CRESOL	34657	12.7	45.11	LB/DAY	2/MONTH	24-HR COMPOSITE
2,4-DINITROPHENOL	34616	11.56		LB/DAY	2/MONTH	24-HR COMPOSITE
2-NITROPHENOL	34591	6,68	***************************************	LB/DAY	2/MONTH	24-HR COMPOSITE
4-NITROPHENOL	34646	11,72		LB/DAY	2/MONTH	24-HR COMPOSITE
PHENOL	34694	2.44	~~~~	LB/DAY	2/MONTH	24-HR COMPOSITE

BASE/NEUTRAL COMPOUNDS	1	 				
ACENAPHTHENE	34205	3,58	9.61	LB/DAY	2/MONTH	24-HR COMPOSITE
ACENAPHTHYLENE	34200	3.58		LB/DAY	2/MONTH	24-HR COMPOSITE
ANTHRACENE	34220	3.58		LB/DAY	2/MONTH	24-HR COMPOSITE
BENZO(A)ANTHRACENE	34526	3.58		LB/DAY	2/MONTH	24-HR COMPOSITE
BENZO(A)PYRENE	34247	3.75		LB/DAY	2/MONTH	24-HR COMPOSITE
3,4-BENZOFLUORANTHENE	34230	3.75	9.93	LB/DAY	2/MONTH	24-HR COMPOSITE
BENZO(K)FLUORANTHENE	34242	3,58		LB/DAY	2/MONTH	24-HR COMPOSITE
BIS(2-ETHYLHEXYL)PHTHALATE	39100	16.77	45.43	LB/DAY	2/MONTH	24-HR COMPOSITE
CHRYSENE	34320	3.58		LB/DAY	2/MONTH	24-HR COMPOSITE
1,2-DICHLOROBENZENE	34536	12.54	26.54	LB/DAY	2/MONTH	24-HR COMPOSITE
1,3-DICHLOROBENZENE	34566	5.05	7.17	LB/DAY	2/MONTH	24-HR COMPOSITE
I,4-DICHLOROBENZENE	34571	2.44	4.56	LB/DAY	2/MONTH	24-HR COMPOSITE
DIETHYL PHTHALATE	34336	13.19	33.06	LB/DAY	2/MONTH	24-HR COMPOSITE
DIMETHYL PHTHALATE	34341	3.09	7.65	LB/DAY	2/MONTH	24-HR COMPOSITE
DI-N-BUTYL PHTHALATE	39110	44		LB/DAY	2/MONTH	24-HR COMPOSITE
2,4-DINITROTOLUENE	34611	18.4	46.41	LB/DAY	2/MONTH	24-HR COMPOSITE
2,6-DINITROTOLUENE	34626	41.53	104 38	LB/DAY	2/MONTH	24-HR COMPOSITE
FLUORANTHENE	34376	4.07	11.07	LB/DAY	2/MONTH	24-HR COMPOSITE
FLUORENE	34381	3.58	9.61	LB/DAY	2/MONTH	24-HR COMPOSITE
HEXACHLOROBENZENE	39700	1.18	2.82	LB/DAY	2/MONTH	24-HR COMPOSITE
HEXACHLOROBUTADIENE	34391	3.26		LB/DAY	2/MONTH	24-HR COMPOSITE
HEXACHLOROETHANE	34396	3.42		LB/DAY	2/MONTH	24-HR COMPOSITE
NAPHTHALENE	34696	3.58		LB/DAY	2/MONTH	24-HR COMPOSITE
NITROBENZENE	34447	4.4		LB/DAY	2/MONTH	24-HR COMPOSITE
PHENANTHRENE	34461	3.58		LB/DAY	2/MONTH	24-HR COMPOSITE
PYRENE	34469	4.07		.B/DAY	2/MONTH	24-HR COMPOSITE
1,2,4-TRICHLOROBENZENE	34551	11.07	22.8	.B/DAY	2/MONTH	24-HR COMPOSITE

OUTFALL 2001 (INTERNAL)

Discharge Type: Continuous

Latitude 30°20'0"N, Longitude 91°14'30"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge treated process and miscellaneous wastewater from Environmental Operations treatment plant to Outfall 001.

PARAMETER						
	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
BODS	00310	5185	13787	LB/DAY	I/DAY	24-HR COMPOSITE
TSS	00530	7793	25140	LB/DAY	I/DAY	24-HR COMPOSITE
pH RANGE EXCURSIONS 1/	82581	NA	0	3/	CONTINUOUS	RECORDER
pH RANGE EXCURSIONS 2/	82582	NA	446	<u>3</u> /	CONTINUOUS	RECORDER
pH 4/	00400	NA	NA	S.U.	CONTINUOUS	RECORDER
NONCONVENTIONAL					·	
FLOW (MGD)	50050	REPORT	REPORT	MGD	CONTINUOUS	RECORDER
VOLATILE COMPOUNDS						
ACRYLONITRILE	34215	15.63	39.41	LB/DAY	I/YEAR	24-HR COMPOSITE
BENZENE	34030	6.03	22.15	LB/DAY	2/WEEK	24-HR COMPOSITE
CARBON TETRACHLORIDE	32102	2.93	6.19	LB/DAY	2/WEEK	24-HR COMPOSITE
CHLOROBENZENE	34301	2,44	4.56	LB/DAY	2/WEEK	24-HR COMPOSITE
CHLOROETHANE	34311	16,94	43.64	LB/DAY	2/WEEK	24-HR COMPOSITE
CHLOROFORM	32106	3.42	7,49	LB/DAY	2/WEEK	24-HR COMPOSITE
1,1-DICHLOROETHANE	34496	3.58	9.61	LB/DAY	2/WEEK	24-HR COMPOSITE
1,2-DICHLOROETHANE	34531	11.07	34.36	LB/DAY	2/WEEK	24-HR COMPOSITE
1,1-DICHLOROETHYLENE	34501	2.61	4.07	LB/DAY	2/WEEK	24-HR COMPOSITE
1,2-DICHLOROPROPANE	34541	24.92	37.45	LB/DAY	2/WEEK	24-HR COMPOSITE
1,3-DICHLOROPROPYLENE	34561	4.72	7.17	LB/DAY	2/WEEK	24-HR COMPOSITE
ETHYLBENZENE	34371	5.2 t	17.59	LB/DAY	2/WEEK	24-HR COMPOSITE
METHYL CHLORIDE	34418	14	30.94	LB/DAY	2/WEEK	24-HR COMPOSITE
METHYLENE CHLORIDE	34423	6.51	14.49	LB/DAY	2/WEEK	24-HR COMPOSITE
TETRACHLOROETHYLENE	34475	3.58	9.12	LB/DAY	2/WEEK	24-HR COMPOSITE
TOLUENE	34010	4.23	13.03	LB/DAY	2/WEEK	24-HR COMPOSITE
1,2-TRANS-DICHLOROETHYLENE	34546	3,42	8.79	LB/DAY	2/WEEK	24-HR COMPOSITE
1,1,1-TRICHLOROETHANE	34506	3.42	8.79	LB/DAY	2/WEEK	24-HR COMPOSITE

PAGE 41

OUTFALL 5821 (INTERNAL)

Discharge Type: Intermittent

Latitude 30°19'30"N, Longitude 91°14'15"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge stormwater from Light Hydrocarbons III to Outfall 001

	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
PARAMETER	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	I/MONTH	ESTIMATE
TOC	00680	N/A	50	MG/L	1/MONTH	GRAB
OIL & GREASE	00556	N/A	15	MG/L	I/MONTH	GRAB
		MINIMUM	MAXIMUM			
pH	00400	6	9	S.U.	I/MONTH	GRAB

PAGE 40

OUTFALL 5811 (INTERNAL)

Discharge Type: Intermittent

Latitude 30°19'30"N, Longitude 91°14'15"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge stormwater from Light Hydrocarbons III to Outfall 001

	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
PARAMETER	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	I/MONTH	ESTIMATE
TOC	00680	N/A	50	MG/L	1/MONTH	GRAB
OIL & GREASE	00556	N/A	15	MG/L	I/MONTH	GRAB
		MINIMUM	MAXIMUM			
pН	00400	6	9	S.U.	I/MONTH	GRAB

OUTFALL 3131 (INTERNAL)

Discharge Type: Intermittent

Latitude 30°19'45"N, Longitude 91°14'45"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge stormwater from Polyethylene C to Outfall 001.

	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
PARAMETER	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	I/MONTH	ESTIMATE
тос	00680	N/A	50	MG/L	I/MONTH	GRAB
OIL & GREASE	00556	N/A	15	MG/L	1/MONTH	GRAB
		MINIMUM	MAXIMUM			
рH	00400	6	9	S.U.	I/MONTH	GRAB

PAGE 42

RESPONSE TO COMMENTS APPENDIX

OUTFALL 2511 (INTERNAL)

Discharge Type: Intermittent

Latitude 30°19'0"N, Longitude 91°14'30"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge stormwater from Vector Plant to Outfall 001.

	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
PARAMETER	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	1/MONTH	ESTIMATE
TOC	00680	N/A	50	MG/L	1/MONTH	GRAB
OIL & GREASE	00556	N/A	15	MG/L	1/MONTH	GRAB
		MINIMUM	MAXIMUM			
рН	00400	6	9	S.U.	I/MONTH	GRAB

PAGE 45

Revised Calculations Pages 46-74

PAGE 44

Biomonitoring Requirements from Part II.E

E. WHOLE EFFLUENT TOXICITY TESTING (48-HOUR ACUTE NOEC FRESHWATER)

1. SCOPE AND METHODOLOGY

a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO FINAL OUTFALL(S): 0

001

REPORTED ON DMR AS FINAL OUTFALL: 001

CRITICAL DILUTION (%):

0.17

EFFLUENT DILUTION SERIES (%):

0.24, 0.17, 0.13

0.10, & 0.07

COMPOSITE SAMPLE TYPE:

Defined at PART I

TEST SPECIES/METHODS:

40 CFR Part 136

TECHNOLOGY LIMITATIONS

Following regulations promulgated at 40<u>CFR</u>122.44(I)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to 40<u>CFR</u>122.44(a) or on State water quality standards and requirements pursuant to 40<u>CFR</u>122.44(d), whichever are more stringent.

Technology limitations have been applied at various internal outfalls. Listed below are all internal outfalls that have mass based limitations for parameters that have a corresponding State water quality standard. The table also lists the basis for the technology requirement. The total mass authorized by the internal outfalls will be compared to the total mass allowed to be discharged without violating a water quality standard. If the total mass allowed by technology requirements is greater than that allowed by the State water quality standards a water quality based permit limitation will be placed at final Outfall 001.

TABLE 1
SUMMARY OF TECHNOLOGY REQUIREMENTS
AT INTERNAL OUTFALLS

40CFR GUIDELINE(S) 414.101	INTERNAL <u>OUTFALL</u> 101	FLOW (MGD) 1.5
	531	2.8
	521	1.79
	741	2.77
	911	1.161
	931	0.8
	1031	0.032
	1041	0.018
	1051	0.133
	1521	0.67
	1531	0.08
	1711	3.51
	3121	0.174
	TOTAL	4.5
414.90		
	2001	22.81
415.63	301	NA

PAGE 46

OUTFALL 001 (FINAL)

Effluent limitations and/or conditions established in the draft permit are in compliance with State water quality standards and the applicable water quality management plan.

POST THIRD ROUND POLICY AND STRATEGY

Section 101 of the Clean Water Act (CWA) states that "...it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited..." To insure that the CWA's prohibitions on toxic discharges are met, EPA has issued a "Policy for the Development of Water Quality-Based Permit Limitations for Toxic Pollutants (49 FR 9016-9019, 3/9/84)." In support of the national policy, Region 6 adopted the "Policy for Post Third Round NPDES Permitting" (3/11/87) and the "Post Third Round NPDES Permit Implementation Strategy" (10/1/92). The Regional policy and strategy are designed to insure that no source will be allowed to discharge any wastewater which (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical State water quality standard resulting in nonconformance with the provisions of 40CFR122.44(d); (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation which threatens human health.

IMPLEMENTATION

The Region is currently implementing its post third round policy in conformance with the Regional strategy. The 5-year NPDES permits contain technology-based effluent limitations reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based effluent limitations and/or conditions are included in the NPDES permits. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls.

Where a technology-based limit is established for a pollutant, the more stringent of either the technology-based limit or the state water quality numerical standard-based limit is established in the permit.

Where no technology-based limit is established in the permit, a state water quality numerical standard-based limit and/or monitoring requirement is established in the permit if there is a reasonable potential for the effluent discharge to cause an exceedance of the state water quality numerical standards-based limit after mixing in the receiving stream.

Calculated state water quality numerical standards-based effluent limitations are screened against pollutant effluent discharge levels (estimated 95% percentile assuming lognormal distribution) not limited by technology.

PAGE 49

METALS AND CYANIDE		·····	T	
ARSENIC (D)		360	190	50
CADMIUM (D)	NOTE (1)	53.829443	1.5717094	10
CHROMIUM (T)	1	NA	NA	NA
CHROMIUM (3+)	NOTE (1)	2440.2594	290,86511	50
CHROMIUM (6+)	1	16	ł1	.50
COPPER (D)	NOTE (1)	28.388831	18,248637	1000
LEAD (D)	NOTE (1)	138.54643	5.3989555	. 50
MERCURY (D)		2.4	0.012	2
NICKEL (D)	NOTE (1)	2015.4856	224.06035	NA
ZINC (D)	NOTE (I)	166.39129	150,7077	5000
CYANIDE (D)		45.9	5.4	663.8
DIOXIN				
2,3,7,8-TCDD		NA	NA	0.0000007
VOLATILE ORGANICS				
BENZENE		2249	1125	1.1
BROMOFORM		2930	1495	3.9
CARBON TETRACHLORIDE	-	2730	1365	0.22
CHLORODIBROMOMETHAN	Ľ.	NA name	NA	0.39
CHLOROFORM DICHLOROBROMOMETHAN	<u> </u>	2890 NA	1445	5.3 0.2
1,2-DICHLOROETHANE	G .	11800	NA 5900	0.36
1,1-DICHLOROETHYLENE		1160	580	0.30
1,3-DICHLOROPROPYLENE		606	303	9.86
ETHYLBENZENE		3200	1600	2390
METHYL CHLORIDE		55000	27500	NA 2570
METHYLENE CHLORIDE		19300	9650	4.4
1,1,2,2-TETRACHLOROETHA	NF.	923	462	0.16
TETRACHLOROETHYLENE		1290	645	0.65
TOLUENE		1270	635	6100
1,1,1-TRICHLOROETHANE		5280	2640	200
1,1,2-TRICHLOROETHANE		1800	900	0.56
TRICHLOROETHYLENE		3900	1950	2.8
VINYL CHLORIDE		NA	NA	1.9
ACID COMPOUNDS				
2-CHLOROPHENOL		258	129	0.1
2,4-DICHLOROPHENOL		202	101	0.1
,			101	3.5
BASE/NEUTRAL COMPOUND	S			
BENZIDINE		250	125	0.0008
HEXACHLOROBENZENE		NA	NA	0.00025
HEXACHLOROBUTADIENE		5.1	1.02	0.09
	1 I		I	

CALCULATION OF NUMERICAL WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS

I. FACILITY INFORMATION

Permittee	DOW Chemical
NPDES Permit No.	LA0003301
Outfall No.	001
Plant effluent flow, Monthly Avg Maximum (MGD)	550
Plant effluent flow, Monthly Avg Maximum (cfs)	851

II. RECEIVING STREAM INFORMATION

Receiving Stream Name	Mississippi River
Basin Name	Mississippi River
Waterbody Segment Code No.	07030 1
Water Body Category No.	1
TSS (mg/L) 15% percentile	42
Hardness (mg/l as CACO3)	151.5
7Q10 Flow (cfs)	141955
Harmonic Mean Flow (cfs)	366748

Freshwater Drinking Water Supply

III. LOUISIANA WATER QUALITY STANDARDS

TABLE 2 APPLICABLE LOUISIANA WATER QUALITY STANDARDS

			DRINKING
	FRESHWATER	FRESHWATER	WATER
	ACUTE	CHRONIC	SUPPLY
D = DISSOLVED	(ug/L)	(ug/L)	(ug/L)
CHLORINE (GOLDBOOK)			
Chlorine (Total Res.)	19	11	NA
NONCONVENTIONAL			
TOTAL PHENOLS (4AAP)	700	350	5
3-CHLOROPHENOL	NA	NA	0.1
4-CHLOROPHENOL	383	192	0.1
2,3-DICHLOROPHENOL	NA	NA	0,04
2,5-DICHLOROPHENOL	NA	NA	0.5
2,6-DICHLOROPHENOL	NA	NA	0.2
3,4-DICHLOROPHENOL	NA	NA	0.3
2,4-D	NA	NA	100
2,4,5-TP (SILVEX)	NA NA	NA NA	10

TABLE 3
HARDNESS BASED WATER QUALITY STANDARDS

1	Acute	Chronic
	(ug/L)	(ug/L)
Cadmium (D)	54	1.57
Chromium (3+)	2440	291
Copper (D)	28	18
Lead (D)	139	5.40
Nickel (D)	2015	224
Zinc (D)	166	151

NPDES permits require that limitations be in total recoverable form. This requires that the dissolved metals criteria be converted to total form (expect for cr 6+)

The TSS value used in the Ct/Cd ratio equation is that listed for the receiving stream of 42 mg/l.

Louisiana surface water quality standards, conversion of numerical standards for certain toxic priority pollutant metals from dissolved form to total recoverable form [freshwater streams and lakes]

Total Recoverable (μ g/L) = Dissolved (μ g/L) * (Ct/Cd)

Ct/Cd = Total/Dissolved Ratio

 $Ct/Cd = 1 + [N * TSS^{(a+1)}]$

TABLE 4
CT/CD EQUATION PARAMETER FOR STREAMS

<u>METAL</u>	<u>N</u>	<u> α</u>
Arsenic	0.48	-0.73
Cadmium	4.00	-1.13
Chromium (3+)	3.36	-0.93
Chromium (6+) <u>1</u> /	****	
Copper	1.04	-0.74
Lead	2.80	-0.80
Mercury	2.90	-1.14
Nickel	0.49	-0.57
Zinc	1.25	-0.70

^{1/ 40&}lt;u>CFR</u>122.45(c)(3): The approved analytical method measures only the dissolved form. Therefore, permit limits are dissolved form.

PESTICIDES AND PCBS			
ALDRIN	3	NA	0.00004
GAMMA-BHC (LINDANE)	5.3	0.21	0.11
CHLORDANE	2.4	0.0043	0.00019
4,4'-DDT	1.1	0.001	0.00019
4,4'-DDE	52.5	10.5	0.00019
4,4'-DDD	0.03	0.006	0.00027
DIELDRIN	2.5	0.0019	0.00005
ENDOSULFAN (TOTAL)	0.22	0.056	0.47
ENDRIN	0.18	0.0023	0.26
HEPTACHLOR	0.52	0,0038	0.00007
PCBS (TOTAL)	2	0.014	0.00001
TOXAPHENE	0.73	0.0002	0.00024

NOTE (1): HARDNESS DEPENDENT FRESHWATER CRITERIA FOR CERTAIN METALS

Dissolved freshwater criteria are calculated using the following equations.

The receiving stream hardness is used to calculate the water quality standards in Table 2. The following equations are used to calculate hardness dependent water quality standards:

Cadmium (D)	Α	cute @EXP((1.128*(@LN(HARD)))-1.6774)
	Chronic	@EXP((0.7852*(@LN(HARD)))-3.49)
Chromium (3+)	Acute	@EXP((0.819*(@LN(HARD)))+3.688)
_	Chronic	@EXP((0.819*(@LN(HARD)))+1.561)
Copper (D)	Acute	@EXP((0.9422*(@LN(HARD)))-1.3844)
	Chronic	@EXP((0.8545*(@LN(HARD)))-1.386)
Lead (D)	Acute	@EXP((1.273*(@LN(HARD)))-1.46)
	Chronic	@EXP((1.273*(@LN(HARD)))-4.705)
Nickel (D)	Acute	@EXP((0.846*(@LN(HARD)))+3.3612)
	Chronic	@EXP((0.846*(@LN(HARD)))+1.1645)
Zinc (D)	Acute	@EXP((0.8473*(@LN(HARD)))+0.8604)
	Chronic	@EXP((0.8473*(@LN(HARD)))+0.7614)

RESPONSE	TO	COM	AENTS.	APPENDIX

PAGE 53

Zinc (T)	4.836	804	729	24180
Cyanide (T)	1	45	5	663

IV. CALCULATION OF WASTELOAD ALLOCATIONS (WLAs) AT END-OF-PIPE (EOP)

COMPLETE MIX MASS BALANCE MODEL (GENERIC)

WLA = Ce (Cd/DF) - ((Cu*Fu)/Fe)

Wasteload Allocation @ EOP

DF = Fe/(Fe + Fu)

Dilution Factor

SPECIFIC WASTELOAD ALLOCATION (WLAs) EQUATIONS

WLAac =	(Cdac/DFac) - ((Cu*Fac)/Fe)	Acute Aquatic Life
WLAch =	(Cdch/DFch) - ((Cu*Fch)/Fe)	Chronic Aquatic Life
WLAhn =	(Cdhn/DFhn) - ((Cu*Fhn)/Fe)	Human Health [Noncarcinogen]
WLAhc =	(Cdhc/DFhc) - ((Cu*Fhc)/Fe)	Human Health [Carcinogen]

SPECIFIC DILUTION FACTOR EQUATIONS

DFac =	Fe/(Fe + Fac)	Acute Aquatic Life
DFch =	Fe/(Fe + Fch)	Chronic Aquatic Life
DFhn =	Fe/(Fe + Fhn)	Human Health [Noncarcinogen]
DFhc =	Fe/(Fe + Fhc)	Human Health [Carcinogen]

KEY TO SYMBOLS

Fe	Flow: F	lant Effi	uent(s) (a) EOP (cfs

Fu Flow: Upstream - Available for Mixing (Generic - cfs)

Fac Flow: Upstream - Available for Mixing (Zone of Initial Dilution - cfs)

Fch Flow: Upstream - Available for Mixing (Mixing Zone - cfs)

Fhn Flow: Upstream - Available for Mixing (Human Health, Noncarcinogen - cfs)

Fhc Flow: Upstream - Available for Mixing (Human Health, Carcinogen - cfs)

Ce Concentration, Effluent(s) @ EOP

Cu Concentration, Upstream (Background)

Cd Concentration, Downstream after Mixing (i.e., Instream Criterion)

Cdac Instream Criterion - Acute Aquatic

Cdcc Instream Criterion - Chronic Aquatic

Cdhn Instream Criterion - Human Health, Noncarcinogen

Cdhc Instream Criterion - Human Health, Carcinogen

DF Dilution Factor after Mixing

DFac Dilution Factor @ ZID (Acute Aquatic Criteria)

SOURCE REFERENCE DOCUMENTS

Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants in Surface and Ground Water - Part 1 (Revised - 1985), Pages 535-536, EPA/600/6-85/002a

Guidance Document Concerning Permitting Implementation of Louisiana Surface Water Quality Standards, LDEQ, 4/15/94 (Version 2).

DERIVATION OF CVCd EQUATION

The source reference documents express the ratio of the total recoverable form to the dissolved form as follows:

Ct/Cd =
$$I + [Kp * TSS * 10^{-6}]$$

Kp = $Kpo * TSS^{\alpha}$
Ct/Cd = $I + [Kpo * TSS^{\alpha} * TSS * 10^{-6}]$

Substituting Kpo = $N * 10^{+6}$ where N is the integer in the Kpo values listed in the reference documents:

	TOTAL TO	DRINKING		
	DISSOLVE	WATER		
	RATIO	ACUTE	CHRONIC	SUPPLY
	<u>Ct/Cd</u>	<u>(ug/L)</u>	(ug/L)	(ug/L)
Arsenic (T)	2.316	834	440	116
Cadmium (T)	3.460	186	5.	35
Chromium (T)	NA	NA	NA	NA
Chromium (3+)	5.364	13091	1560	268
Chromium (6+)	1	16	11	50
Copper (T)	3.748	106	68	3748
Lead (T)	6.913	957	37	346
Mercury (T)	2.718	6.52	0.03	5.437
Nickel (T)	3.444	6942	772	0

Gamma-BHC (Lindane)

-	RESPONSE TO COMMENTS APPENDIX	PAGE 55
Copper (T)	0	
Lead (T)	Ö	
Mercury (T)	Ö	
Nickel (T)	0	
Zinc (T)	0	
Cyanide (T)	0	
Cyumuc (1)	V	
DIOXIN		
2,3,7,8-TCDD	0.00E+000	
VOLATILE ORGANICS		
Benzene	0	•
Bromoform	0	
Carbon Tetrachloride	0	
Chlorodibromomethane	0	
Chloroform	0	
Dichlorobromomethane	0	
1,2-Dichloroethane	0	
1,1-Dichloroethylene	0	
1,3-Dichloropropylene	0	
Ethylbenzene	0	
Methyl Chloride	0	
Methylene Chloride	0	
1,1,2,2-Tetrachloroethane	0	
Tetrachloroethylene	0	
Toluene	0	
1,1,1-Trichloroethane	0	
1,1,2-Trichloroethane	0	
Trichloroethylene	0	
Vinyl Chloride	0	
ACID COMPOUNDS		
2-Chlorophenol	0	
2,4-Dichlorophenol .	0	
BASE/NEUTRAL COMPO	DUNDS	
Benzidine	0	
Hexachlorobenzene	0	
Hexachlorobutadiene	0	
PESTICIDES AND PCBs		
Aldrin	0	

DFch Dilution Factor @ MZ (Chronic Aquatic Criteria)

DFhn Dilution Factor @ HHN (Human Health Criteria)

DFhc Dilution Factor @ HCN (Human Health Criteria, Carcinogen)

FLOW	VALUE		
Plant Effluent(s) - cfs	Fe	851 cfs	i
Upstream Flow Applying @ ZID - cfs	Fac	4732 cfs	
Upstream Flow Applying @ MZ - cfs	Fch	47318 cfs	
Upstream Flow Applying @ HHN - cfs	Fhn	141955 cfs	
Upstream Flow Applying @ HHC - cfs	Fhc	366748 cfs	
DILUTION FACTOR	VALUE		
Dilution Factor @ ZID - Fraction	DFac	0.1525	l
Dilution Factor @ MZ - Fraction	DFch	0.0177	
Dilution Factor @ HHN - Fraction	DFhn	0.0060	
Dilution Factor @ HHC - Fraction	DFhc	0.0023	

BACKGROUND CONCENTRATION DATA

	Cu (ug/L)
CHLORINE (GOLDBOOK)	
Chlorine (Total Res.)	0
NONCONVENTIONAL	
Total Phenois (4AAP)	0
3-Chlorophenol	0
4-Chlorophenol	0
2,3-Dichlorophenol	0
2,5-Dichlorophenol	0
2,6-Dichlorophenol	0
3,4-Dichlorophenol	0
2,4-D	0
2,4,5-TP (Silvex)	0
METALS AND CYANIDE	•
Arsenic (T)	0
Cadmium (T)	0
Chromium (T)	0
Chromium (3+)	0
Chromium (6+)	0

Τ	40	5 5	664	65	7 725	26587
	····	<u></u>		<u> </u>		
F	NA	NA NA	0.0000007	NA	NA	0.000733
+		 			 	
c	2249	1125	1.1	32201	150951	113
C	2930	1495	3.9	41951	200597	403
E	2730	1365	0.22	39088	183154	22
E	NA	NA	0.39	NA	NA	403
c	2890	1445	5.3	41379	193888	5476
c	NA	NA		 	NA	207
c	11800	5900	0.36	168951	791653	372
c	1160	580	0.05	16609	77824	52
1	606	303	9.86	8677	40656	3949
1	3200	1600	2390	45817	214686	957280
┰	55000	27500	NA	787482	3689910	NA
c	19300	9650	4.4	276335	1294823	4546
c	923	462	0.16	13215	61990	165
E	1290	645		18470		672
Τ	1270	635	6100	18184	85203	2443267
Т	5280	2640	200	75598	354231	80107
c	1800	900	0.56	25772	120761	579
C	3900	1950	2.8	55840	261648	2893
E	NA	NA	1.9	NA	NA.	1963
ļ						
-						
-						40
╂┈	202	101	0.3	2892	13552	120
╈						
c	250	125	80000.0	3579	16772	0
<u> </u>			0.00025	NΛ	NA	0.26
E	5.1	1.02	0.09	73	137	93
_						
┢			0.00004	43	N14	0.04
						0.04
는						114
				***************************************		0.20
F				***************************************		0.20
•—				***************************************	~~~~	0.20
						0.28
<u> </u>			-	***************************************		0.05
						188
L	0.18	0,0023	0.26	2.58 7.45	0.31	104
		C 2249 C 2930 C 2730 C NA C 11800 C 1160 G 606 3200 C 19300 C 19300 C 1270 5280 C 1290 C 1270 5280 C 1800 C 3900 C NA C 3900 C 1800 C 3900 C 55000 C 55000 C 15000 C 55000 C 1270 C 5280 C 1270 C 3900 C 3900 C 1270 C 3900	C NA NA C 2930 1495 C 2730 1365 C NA NA C 2890 1445 C NA NA C 11800 5900 C 1160 580 606 303 3200 1600 C 19300 9650 C 19300 900 C 1950 C 1950 C 1800 900 C 3900 1950 C NA NA C 3900 1950 C 111 1.002	C NA NA O.0000007 C 2249 1125 1.1 C 2930 1495 3.9 C 2730 1365 0.22 C NA NA 0.39 C 2890 1445 5.3 C NA NA 0.2 C 11800 5900 0.36 C 1160 580 0.05 606 303 9.86 3200 1600 2390 55000 27500 NA C 19300 9650 4.4 C 19300 9650 4.4 C 19300 9650 4.4 C 19300 9650 4.4 C 19300 9650 0.56 C 1800 900 0.56 C 3900 1950 2.8 C NA NA NA 1.9 C 38 129 0.1 2258 129 0.1 2258 129 0.1 202 101 0.3 C 5.3 0.21 0.10 C 5.3 0.21 0.10 C 5.3 0.21 0.10 C 5.3 0.21 0.11 C 2.4 0.0043 0.00019 C 5.3 10.5 0.00019 C 5.3 10.5 0.00019 C 5.3 10.5 0.00019 C 5.3 10.5 0.00019 C 1.1 0.001 0.00027 C 2.5 0.0019 0.00005 C 2.5 0.0019 0.00005	C NA NA 0.000007 NA C 2249 1125 1.1 32201 C 2930 1495 3.9 41951 C 2730 1365 0.22 39088 C NA NA 0.39 NA C 2890 1445 5.3 41379 C NA NA 0.2 NA C 11800 5900 0.36 168951 C 1160 580 0.05 16609 606 303 9.86 8677 3200 1600 2390 45817 55000 27500 NA 787482 C 19300 9650 4.4 276335 G 923 462 0.16 13215 C 1290 645 0.65 18470 1270 635 6100 18184 5280 2640 200 75598 C 1800 900 0.56 25772 C 3900 1950 2.8 55840 C NA NA 1.9 NA 258 129 0.1 3694 C NA NA 1.9 NA C 5.1 1.02 0.09 73 C 5.3 0.21 0.11 76 C 2.4 0.0043 0.00019 34 C 5.3 10.5 0.00019 752 C 0.03 0.006 0.00027 0.43 C 2.5 0.0019 0.00005 36 C 2.2 0.056 0.47 3.15	C NA NA 0.000007 NA NA C 2249 1125 1.1 32201 150951 C 2930 1495 3.9 41951 200597 C 2730 1366 0.22 39088 183154 C NA NA 0.39 NA NA C 2890 1445 5.3 41379 193888 C NA NA 0.2 NA NA C 11800 5900 0.36 168951 791653 C 1160 580 0.05 16609 77824 606 303 9.86 8677 40656 3200 1600 2390 45817 214686 55000 27500 NA 787482 3689910 C 19300 9650 4.4 276335 1294823 C 923 462 0.16 13215 61990 C 1290 645 0.65 18470 86545 1270 635 6100 18184 85203 5280 2640 200 75598 354231 C 1800 900 0.56 25772 120761 C 3900 1950 2.8 55840 261648 C NA NA 1.9 NA NA C 5.1 1.02 0.09 73 137 C 3 NA NA 0.00004 43 NA C 5.3 0.21 0.11 76 28 C 2.4 0.0043 0.00019 34 0.58 C 1.1 0.001 0.00019 16 0 C 53 10.5 0.00019 752 1409 C 0.03 0.066 0.00027 0.43 0.81 C 2.5 0.02 0.056 0.47 3.15 7.51

PAGE 56

Chlordane	0
4,4'-DDT	0
4,4'-DDE	0
4,4'-DDD	0
Dieldrin	0
* Alpha-Endosulfan	
* Beta-Endosulfan	
* Endosulfan Sulfate	
Endosulfan (Total)	0
Endrin	0
Heptachlor	0
* PCB-1242	
* PCB-1254	
* PCB-1221	
* PCB-1232	
* PCB-1248	
* PCB-1260	
* PCB-1016	
PCBs (Total)	0
Toxaphene	0

TABLE 6 WASTELOAD ALLOCATIONS

	1		<u> </u>		<u> </u>	HUMAN
			HUMAN	ACUTE	CHRONIC	
	ACUTE	CHRONIC	HEALTH	WLAac	WLAch	WLAb
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
CHLORINE (GOLDBOOK)						
CHLORINE (TOTAL RES.)	19	11	NA	272	1476	NA
NONCONVENTIONAL						
TOTAL PHENOLS (4AAP)	700	350	5	10022	46962	2003
METALS AND CYANIDE						
ARSENIC (T)	360	190	50	5154	25494	20027
CADMIUM (T)	54	2	10	771	211	4005
CHROMIUM (3+)	2440	291	50	34939	39028	20027
CHROMIUM (6+)	C 16	11	50	229	1476	51661
COPPER (T)	28	18	1000	406	2449	400536
LEAD (T)	139	.5	50	1984	724	20027
MERCURY (T)	2.4	0.012	2.00	34	2	801
NICKEL (T)	2015	224		28857	30064	NA
ZINC (I)	166	151	5000	2382	20222	2002678

CARBON TETRACHLORIDE 12508 97071 227 227 CHLORODIBROMOMETHANE NA NA 403				,	· · · · · · · · · · · · · · · · · · ·
CHLORODIBROMOMETHANE NA NA 403 400 CHLOROFORM 13241 102761 5476 5476 DICHLOROBROMOMETHANE NA NA 207 207 1,2-DICHLOROETHANE 54064 419576 372 377 1,1-DICHLOROETHYLENE 5315 41246 52 53 1,3-DICHLOROPROPYLENE 2777 21548 3949 2777 ETHYLBENZENE 14661 113783 957280 14661 METHYL CHLORIDE 25194 1955652 NA 251994 METHYLENE CHLORIDE 88427 686256 4546 4546 1,1,2,2-TETRACHLOROETHANE 4229 32855 1655 165 TOLUENE 5819 45158 2443267 5819 1,1,1-TRICHLOROETHANE 24191 187743 80107 24191 1,1,2-TRICHLOROETHANE 8247 64003 579 579 TRICHLOROETHYLENE 17869 138674 2893 2893 VINYL CHLORIDE NA NA 1963 1963 ACID COMPOUNDS ACID COMPOUNDS BENZIDINE 1182 9174 40 40 2,4-DICHLOROPHENOL 926 7183 120 120 BASE/NEUTRAL COMPOUNDS BENZIDINE 1145 8889 0.08 0.08 HEXACHLOROBENZENE NA NA 0.26 0.26 HEXACHLOROBUTADIENE 23 73 93 23 PESTICIDES AND PCBS ALDRIN 14 NA 0.04 0.04 GAMMA-BHC (LINDANE) 24 15 114 15 CHLORDANE 11 0 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.20 4,4'-DDD 0.14 0.43 0.28 0.14 4,4'-DDD 1.14 0.43 0.28 0.14 4,4'-DDD 0.14 0.43 0.28 0.14 4,4'-DDD 0.14 0.43 0.28 0.14 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDORIN 0.82 0.16 104 0.16 HEPTACHLOR 9.16 1.00 0.01 0.01	BROMOFORM			+	
CHLOROFORM				227	
DICHLOROBROMOMETHANE NA	CHLORODIBROMOMETHANE	NA	NA	403	403
1,2-DICHLOROETHANE \$4064 \$419576 372 377 1,1-DICHLOROETHYLENE \$5315 \$41246 \$52 \$52 1,3-DICHLOROPROPYLENE 2777 21548 3949 2777 ETHYLBENZENE 14661 113783 957280 14661 METHYL CHLORIDE 251994 1955652 NA 251994 METHYLENE CHLORIDE 88427 686256 4546 4546 1,1,2,2-TETRACHLOROETHANE 4229 32855 165 165 TETRACHLOROETHANE 5910 45869 672 672 TOLUENE 5819 45158 2443267 5819 1,1,1-TRICHLOROETHANE 24191 187743 80107 24191 1,1,2-TRICHLOROETHANE 2427 64003 579 579 TRICHLOROETHYLENE 17869 138674 2893 2893 VINYL CHLORIDE NA NA 1963 1963 ACID COMPOUNDS	CHLOROFORM	13241	102761	5476	5476
1,1-DICHLOROETHYLENE 5315	DICHLOROBROMOMETHANE	NA	NA	207	207
1,3-DICHLOROPROPYLENE 2777 21548 3949 2777 21548 3949 2777 21548 3949 2777 21548 3949 2777 21548 3949 2777 21548 3949 2777 21548 3949 2777 21548 3949 2777 21548 3949 2777 21548 3949 2777 21548 3949 2777 21548 3949 2777 21548 3949 2777 21548 3949 2777 21548 3949 251994	1,2-DICHLOROETHANE	54064	419576	372	372
ETHYLBENZENE 14661 113783 957280 14661 METHYL CHLORIDE 251994 1955652 NA 251994 METHYLENE CHLORIDE 88427 686256 4546 4546 1,1,2,2-TETRACHLOROETHANE 4229 32855 165 165 TETRACHLOROETHYLENE 5910 45869 672 672 TOLUENE 5819 45158 2443267 5819 1,1,1-TRICHLOROETHANE 24191 187743 80107 24191 1,1,2-TRICHLOROETHANE 8247 64003 579 579 TRICHLOROETHYLENE 17869 138674 2893 2893 VINYL CHLORIDE NA NA 1963 1963 ACID COMPOUNDS 2-CHLOROPHENOL 1182 9174 40 40 2,4-DICHLOROETHANE 1182 9174 40 40 2,4-DICHLOROPHENOL 926 7183 120 120 BASE/NEUTRAL COMPOUNDS BENZIDINE 1145 8889 0.08 0.08 HEXACHLOROBUTADIENE 23 73 93 23 PESTICIDES AND PCBS ALDRIN 14 NA 0.04 0.04 GAMMA-BHC (LINDANE) 24 15 114 15 CHLORDANE 11 0 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.20 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDRIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	1,1-DICHLOROETHYLENE	5315	41246	52	52
METHYL CHLORIDE 251994 1955652 NA 251994 METHYLENE CHLORIDE 88427 686256 4546 4546 1.1.2,2-TETRACHLOROETHANE 4229 32855 165 163 TETRACHLOROETHYLENE 5910 45869 672 672 7672 TOLUENE 5819 45158 2443267 5819 1187743 80107 24191 1187743 80107 24191 1187743 80107 24191 1187743 80107 24191 1187743 80107 24191 1187743 80107 24191 1187743 80107 24191 1187743 80107 24191 1187743 80107 24191 1187743 80107 24191 1187743 80107 24191 118743 80107 24191 118743 80107 24893 2893 2893 2893 2893 2893 2893 2893 2893 2893 2893 2893 2893 2893 2893 2893 2893 2893 2893 </td <td>1,3-DICHLOROPROPYLENE</td> <td>2777</td> <td>21548</td> <td>3949</td> <td>2777</td>	1,3-DICHLOROPROPYLENE	2777	21548	3949	2777
METHYLENE CHLORIDE 88427 686256 4546 4546 1,1,2,2-TETRACHLOROETHANE 4229 32855 165 165 TETRACHLOROETHYLENE 5910 45869 672 672 TOLUENE 5819 45158 2443267 5819 1,1,1-TRICHLOROETHANE 24191 187743 80107 24191 1,1,2-TRICHLOROETHANE 8247 64003 579 579 TRICHLOROETHYLENE 17869 138674 2893 2893 VINYL CHLORIDE NA NA 1963 1963 ACID COMPOUNDS 2-CHLOROPHENOL 1182 9174 40 40 2,4-DICHLOROPHENOL 926 7183 120 120 BASE/NEUTRAL COMPOUNDS BENZIDINE 1145 8889 0.08 0.08 HEXACHLOROBENZENE NA NA 0.26 0.26 HEXACHLOROBUTADIENE 23 73 93 23 PESTICIDES AND PCBS ALDRIN 14 NA 0.04 0.04 GAMMA-BHC (LINDANE) 24 15 114 15 CHLORDANE 11 0 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.20 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDORN 1.23 0.27 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	ETHYLBENZENE	14661	113783	957280	14661
1.1.2,2-TETRACHLOROETHANE 4229 32855 165 165 TETRACHLOROETHYLENE 5910 45869 672 672 TOLUENE 5819 45158 2443267 5819 1.1.1-TRICHLOROETHANE 24191 187743 80107 24191 1.1.2-TRICHLOROETHANE 8247 64003 579 579 TRICHLOROETHYLENE 17869 138674 2893 2893 VINYL CHLORIDE NA NA 1963 1963 ACID COMPOUNDS 2-CHLOROPHENOL 1182 9174 40 40 2,4-DICHLOROPHENOL 926 7183 120 120 BASE/NEUTRAL COMPOUNDS BENZIDINE 1145 8889 0.08 0.08 HEXACHLOROBENZENE NA NA 0.26 0.26 HEXACHLOROBUTADIENE 23 73 93 23 PESTICIDES AND PCBS ALDRIN 14 NA 0.04 0.04 GAMMA-BHC (LINDANE) 24 15 114 15 CHLORDANE 11 0 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.07 4,4'-DDD 0.14 0.43 0.28 0.14 CHLORIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDRIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	METHYL CHLORIDE	251994	1955652	NA	251994
TETRACHLOROETHYLENE 5910 45869 672 672 TOLUENE 5819 45158 2443267 5819 1,1,1-TRICHLOROETHANE 24191 187743 80107 24191 1,1,2-TRICHLOROETHANE 8247 64003 579 579 TRICHLOROETHYLENE 17869 138674 2893 2893 VINYL CHLORIDE NA NA 1963 1963 ACID COMPOUNDS 2-CHLOROPHENOL 1182 9174 40 40 2,4-DICHLOROPHENOL 926 7183 120 120 BASE/NEUTRAL COMPOUNDS BENZIDINE 1145 8889 0.08 0.08 HEXACHLOROBENZENE NA NA 0.26 0.26 HEXACHLOROBUTADIENE 23 73 93 23 PESTICIDES AND PCBS ALDRIN 14 NA 0.04 0.04 GAMMA-BHC (LINDANE) 24 15 114 15 CHLORDANE 11 0 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.20 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDRIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	METHYLENE CHLORIDE	88427	686256	4546	4546
TOLUENE 5819 45158 2443267 5819 1,1,1-TRICHLOROETHANE 24191 187743 80107 24191 1,1,2-TRICHLOROETHANE 8247 64003 579 579 TRICHLOROETHYLENE 17869 138674 2893 2893 VINYL CHLORIDE NA NA 1963 1963 ACID COMPOUNDS 2-CHLOROPHENOL 1182 9174 40 40 2,4-DICHLOROPHENOL 926 7183 120 120 BASE/NEUTRAL COMPOUNDS BENZIDINE 1145 8889 0.08 0.08 HEXACHLOROBENZENE NA NA 0.26 0.26 HEXACHLOROBUTADIENE 23 73 93 23 PESTICIDES AND PCBS ALDRIN 14 NA 0.04 0.04 GAMMA-BHC (LINDANE) 24 15 114 15 CHLORDANE 11 0 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.07 4,4'-DDT 5.04 0.07 0.20 0.07 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDORN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 PCBS (TOTAL) 9.16 1.00 0.01	1,1,2,2-TETRACHLOROETHANE	4229	32855	165	165
1,1,1-TRICHLOROETHANE 24191 187743 80107 24191 1,1,2-TRICHLOROETHANE 8247 64003 579 579 TRICHLOROETHYLENE 17869 138674 2893 2893 VINYL CHLORIDE NA NA 1963 1963 ACID COMPOUNDS	TETRACHLOROETHYLENE	5910	45869	672	672
1,1,2-TRICHLOROETHANE	TOLUENE	5819	· 45158	2443267	5819
TRICHLOROETHYLENE 17869 138674 2893 2893 VINYL CHLORIDE NA NA 1963 1963 ACID COMPOUNDS 2-CHLOROPHENOL 1182 9174 40 40 2,4-DICHLOROPHENOL 926 7183 120 120 BASE/NEUTRAL COMPOUNDS BENZIDINE 1145 8889 0.08 0.08 HEXACHLOROBENZENE NA NA 0.26 0.26 HEXACHLOROBUTADIENE 23 73 93 23 PESTICIDES AND PCBS ALDRIN 14 NA 0.04 0.04 GAMMA-BHC (LINDANE) 24 15 114 15 CHLORDANE 11 0 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.07 4,4'-DDE 241 747 0.20 0.20 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDRIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	1,1,1-TRICHLOROETHANE	24191	187743	80107	24191
VINYL CHLORIDE NA NA 1963 1963 ACID COMPOUNDS 2-CHLOROPHENOL 1182 9174 40 40 2,4-DICHLOROPHENOL 926 7183 120 120 BASE/NEUTRAL COMPOUNDS BENZIDINE 1145 8889 0.08 0.08 HEXACHLOROBENZENE NA NA 0.26 0.26 HEXACHLOROBUTADIENE 23 73 93 23 PESTICIDES AND PCBS ALDRIN 14 NA 0.04 0.04 GAMMA-BHC (LINDANE) 24 15 114 15 CHLORDANE 11 0 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.07 4,4'-DDE 241 747 0.20 0.20 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDRIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	I,1,2-TRICHLOROETHANE	8247	64003	579	579
ACID COMPOUNDS 2-CHLOROPHENOL 1182 9174 40 40 2,4-DICHLOROPHENOL 926 7183 120 120 BASE/NEUTRAL COMPOUNDS BENZIDINE 1145 8889 0.08 0.08 HEXACHLOROBENZENE NA NA 0.26 0.26 HEXACHLOROBUTADIENE 23 73 93 23 PESTICIDES AND PCBS ALDRIN 14 NA 0.04 0.04 GAMMA-BHC (LINDANE) 24 15 114 15 CHLORDANE 11 0 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.07 4,4'-DDE 241 747 0.20 0.20 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDORIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 PCBS (TOTAL) 9.16 1.00 0.01	TRICHLOROETHYLENE	17869	138674	2893	2893
2-CHLOROPHENOL 1182 9174 40 40 2,4-DICHLOROPHENOL 926 7183 120 120 BASE/NEUTRAL COMPOUNDS BENZIDINE 1145 8889 0.08 0.08 HEXACHLOROBENZENE NA NA 0.26 0.26 HEXACHLOROBUTADIENE 23 73 93 23 PESTICIDES AND PCBS ALDRIN 14 NA 0.04 0.04 GAMMA-BHC (LINDANE) 24 15 114 15 CHLORDANE 11 0 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.20 4,4'-DDE 241 747 0.20 0.20 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDRIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	VINYL CHLORIDE	NA	NA	1963	1963
2-CHLOROPHENOL 1182 9174 40 40 2,4-DICHLOROPHENOL 926 7183 120 120 BASE/NEUTRAL COMPOUNDS BENZIDINE 1145 8889 0.08 0.08 HEXACHLOROBENZENE NA NA 0.26 0.26 HEXACHLOROBUTADIENE 23 73 93 23 PESTICIDES AND PCBS ALDRIN 14 NA 0.04 0.04 GAMMA-BHC (LINDANE) 24 15 114 15 CHLORDANE 11 0 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.20 4,4'-DDE 241 747 0.20 0.20 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDRIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01					***
2,4-DICHLOROPHENOL 926 7183 120 120 BASE/NEUTRAL COMPOUNDS BENZIDINE 1145 8889 0.08 0.08 HEXACHLOROBENZENE NA NA 0.26 0.26 HEXACHLOROBUTADIENE 23 73 93 23 PESTICIDES AND PCBS ALDRIN 14 NA 0.04 0.04 GAMMA-BHC (LINDANE) 24 15 114 15 CHLORDANE 11 0 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.07 4,4'-DDE 241 747 0.20 0.20 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDRIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 PCBS (TOTAL) 9.16 1.00 0.01	ACID COMPOUNDS				
BASE/NEUTRAL COMPOUNDS BENZIDINE 1145 8889 0.08 0.08 HEXACHLOROBENZENE NA NA 0.26 0.26 HEXACHLOROBUTADIENE 23 73 93 23 PESTICIDES AND PCBS ALDRIN 14 NA 0.04 0.04 GAMMA-BHC (LINDANE) 24 15 114 15 CHLORDANE 11 0 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.07 4,4'-DDE 241 747 0.20 0.20 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDRIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	2-CHLOROPHENOL	1182	9174	40	40
BENZIDINE 1145 8889 0.08 0.08 HEXACHLOROBENZENE NA NA 0.26 0.26 HEXACHLOROBUTADIENE 23 73 93 23 PESTICIDES AND PCBS ALDRIN 14 NA 0.04 0.04 GAMMA-BHC (LINDANE) 24 15 114 15 CHLORDANE 11 0 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.20 4,4'-DDE 241 747 0.20 0.20 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDORIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	2,4-DICHLOROPHENOL	926	7183	120	120
BENZIDINE 1145 8889 0.08 0.08 HEXACHLOROBENZENE NA NA 0.26 0.26 HEXACHLOROBUTADIENE 23 73 93 23 PESTICIDES AND PCBS ALDRIN 14 NA 0.04 0.04 GAMMA-BHC (LINDANE) 24 15 114 15 CHLORDANE 11 0 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.20 4,4'-DDE 241 747 0.20 0.20 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDORIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01					
HEXACHLOROBENZENE NA NA 0.26 0.26 HEXACHLOROBUTADIENE 23 73 93 23 PESTICIDES AND PCBS ALDRIN 14 NA 0.04 0.04 GAMMA-BHC (LINDANE) 24 15 114 15 CHLORDANE 11 0 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.07 4,4'-DDE 241 747 0.20 0.20 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDRIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 PCBS (TOTAL) 9.16 1.00 0.01	BASE/NEUTRAL COMPOUNDS				***************************************
PESTICIDES AND PCBS	BENZIDINE	1145	8889	0.08	0.08
PESTICIDES AND PCBS ALDRIN	HEXACHLOROBENZENE	NA	NA	0.26	0.26
ALDRIN	HEXACHLOROBUTADIENE	23	73	93	23
ALDRIN					<u></u>
GAMMA-BHC (LINDANE) 24 15 114 15 CHLORDANE 11 0 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.07 4,4'-DDE 241 747 0.20 0.20 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDRIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	PESTICIDES AND PCBS				
CHLORDANE 11 0 0.20 0.20 4,4'-DDT 5.04 0.07 0.20 0.07 4,4'-DDE 241 747 0.20 0.20 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDRIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	ALDRIN	14	NA	0.04	0.04
4,4'-DDT 5.04 0.07 0.20 0.07 4,4'-DDE 241 747 0.20 0.20 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDRIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	GAMMA-BHC (LINDANE)	24	15	114	15
4,4'-DDE 24'1 747 0.20 0.20 4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDRIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	CHLORDANE	11	0	0.20	0.20
4,4'-DDD 0.14 0.43 0.28 0.14 DIELDRIN i.1 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDRIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	4,4'-DDT	5.04	0.07	0.20	0.07
DIELDRIN 11 0.14 0.05 0.05 ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDRIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	4,4'-DDE	241	747	0.20	0.20
ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDRIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	4,4'-DDD	0.14	0.43	0.28	0.14
ENDOSULFAN (TOTAL) 1.01 3.98 188 1.01 ENDRIN 0.82 0.16 104 0.16 HEPTACHLOR 2.38 0.27 0.07 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	DIELDRIN	11	0.14	0.05	0.05
HEPTACHLOR 2.38 0.27 0.07 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	ENDOSULFAN (TOTAL)	1.01	3.98	188	1.01
HEPTACHLOR 2.38 0.27 0.07 0.07 PCBS (TOTAL) 9.16 1.00 0.01 0.01	ENDRIN	0.82	0.16	104	0.16
	HEPTACHLOR	2.38	0.27	0.07	0.07
TOXAPHENE 334 001 025 001	PCBS (TOTAL)	9.16	1.00	0.01	0.01
normaniament priority vival (1914)	TOXAPHENE	3.34	0.01	0.25	0.01

CALCULATE WATER QUALITY STANDARD BASED CONCENTRATION BASIS (ug/L)

PAGE 58

PCBS (TOTAL)	r	. 2	0.014	10000.0	29	1.88	0.01
TOXAPHENE	¢	0.73	0,0002	0.00024	10	0.03	0.25

CALCULATE LONG TERM AVERAGES (LTA2, LTA2, LTA2) AND SELECT LIMITING LONG TERM AVERAGE (LTA1)

LONG TERM AVERAGE EQUATIONS

LTAa Step 3 WLAa * 0.32

Long Term Average (Acute)

LTAc Step 3 WLAc * 0.53

Long Term Average (Chronic)

LTAh Step 3 WLAh * 1.00

Long Term Average (Human Health)

LTAl Most restrictive value of LTAa, LTAc, or LTAh

TABLE 7
CALCULATION OF LTAS AND LIMITING LTA

	ACUTE	CHRONIC	HEALTH	LIMITING
	LTAa	LTAC	LTAh	LTAI
	(ug/L)	(ug/L)	(ug/L)	(ug/L)
CHLORINE (GOLDBOOK)		, , , , , , , , , , , , , , , , , , ,	1	
CHLORINE (TOTAL RES.)	87	782	NA	87
NONCONVENTIONAL		ļ		
TOTAL PHENOLS (4AAP)	3207	24890	2003	2003
METALS AND CYANIDE				
ARSENIC (T)	1649	13512	20027	1649
CADMIUM (T)	247	112	4005	112
CHROMIUM (T)NA	NA	NA	NA	NA
CHROMIUM (3+)	11181	20685	20027	11181
CHROMIUM (6+)	73	782	51661	73
COPPER (T)	130	1298	400536	130
LEAD (T)	635	384	20027	384
MERCURY (T)	11	0.85	801.07	0.85
NICKEL (T)	9234	15934	NA	9234
ZINC (I)	762	10718	2002678	762
CYANIDE (T)	210	384	265876	210
DIOXIN				
2,3,7,8-TCDD	NA	NA	0.000734	0.00073
VOLATILE ORGANICS				
BENZENE	10304	80004	1137	1137

TABLE 8 CALCULATION OF END OF PIPE WATER QUALITY STANDARDS CONCENTRATION BASED

	LIMITING	MONTHLY	DAILY
	LTAI	AVERAGE	MAXIMUM
	(ug/L)	(ug/L)	(ug/L)
CHLORINE (GOLDBOOK)			
CHLORINE (TOTAL RES.)	87	114	271
NONCONVENTIONAL			
TOTAL PHENOLS (4AAP)	2003	2003	4766
METALS AND CYANIDE			
ARSENIC (T)	1649	2161	5130
CADMIUM (T)	112	146	348
CHROMIUM (3+)	11181	14647	34772
CHROMIUM (6+)	73	96	228
COPPER (T)	130	170	405
LEAD (T)	384	503	1194
MERCURY (T)	0.9	1.12	_ 2.7
NICKEL (T)	9234	12097	28719
ZINC (1)	762	999	2371
CYANIDE (T)	210	275	654
DIOXIN			
2,3,7,8-TCDD	0.0007	0.0007336	0.0017
VOLATILE ORGANICS			·
BENZENE	1137	1137	2705
BROMOFORM	4030	4030	9590
CARBON TETRACHLORIDE	227	227	541
CHLORODIBROMOMETHANE	403	403	959
CHLOROFORM	5476	5476	13033
DICHLOROBROMOMETHANE	207	207	492
1,2-DICHLOROETHANE	372	372	885
1,1-DICHLOROETHYLENE	52	52	123
1,3-DICHLOROPROPYLENE	2777	3637	8635
ETHYLBENZENE	14661	19207	45597
METHYL CHLORIDE	251994	330112	783702
METHYLENE CHLORIDE	4546	4546	10820
1,1,2,2-TETRACHLOROETHANE	165	165	393
TETRACHLOROETHYLENE	672	672	1598
TOLUENE	5819	7623	18096
1,1,1-TRICHLOROETHANE	24191	31691	7 <i>5</i> 235

COPPER (T)	47	115	782	1856
LEAD (T)	23	57	2307	5477
NICKEL (T)	36	. 93	55489	131734
VOLATILE ORGANICS				
BENZENE	12.83	38.14	5213.3215	12408
CARBON TETRACHLORIDE	19.87	51.53	1042,6643	2482
CHLOROFORM	16.67	46.27	25118.731	59783
1,2-DICHLOROETHANE	32.56	102.86	1706.1779	4061
I,1-DICHLOROETHYLENE	5.24	11.23	236.96916	564
1,3-DICHLOROPROPYLENE	28.11	101.92	16684.014	39609
ETHYLBENZENE	22.15	62.93	88100,405	209154
METHYL CHLORIDE	27.14	66.15	1514225.7	3594841
METHYLENE CHLORIDE	10.82	34.79	20853.286	49631
TETRACHLOROETHYLENE	9.79	28.69	3080.5991	7332
TOLUENE	7.57	21.86	34964.848	83008
1,1,1-TRICHLOROETHANE	6.05	15.84	145365.67	345105
1,1,2-TRICHLOROETHANE	7,24	23.95	2654,0546	6317
TRICHLOROETHYLENE	6.52	17.03	13270.273	31583
VINYL CHLORIDE	28.51	64.17	9004.828	21431
ACID COMPOUNDS				
2-CHLOROPHENOL	5.05	15.96	183.72568	437
2,4-DICHLOROPHENOL	6.35	18.24	551.17704	1312
BASE/NEUTRAL COMPOUNI	SC			
HEXACHLOROBENZENE	25.83	99.31	1.1848458	2.82
HEXACHLOROBUTADIENE	20.2	53.32	140.41002	333.34

In all cases, the technology-based draft permit effluent limits (where established) are more stringent than those based on state numerical water quality numerical standards except for the following pollutants: Hexachlorobenzene.

VI. COMPARE 95TH PERCENTILE OF EFFLUENT DATA WITH WQ DAILY AVERAGE CONCENTRATION BASIS

ESTIMATE OF 95TH PERCENTILE VALUE (ASSUMING LOGNORMAL DISTRIBUTION)

95%'TILE = Geometric Mean * (2.13)

Geometric Mean = $(X1 * X2 * X3 * ... * Xn)^{(1/n)}$

X = Effluent Datum Value

n = Effluent Datum Number

If all data values are not available, the highest datum value reported is used for the geometric mean value.

1,1,2-TRICHLOROETHANE	579	579	1377
TRICHLOROETHYLENE	2893	2893	6885
VINYL CHLORIDE	1963	1963	4672
ACID COMPOUNDS			
2-CHLOROPHENOL	40	40	95
2,4-DICHLOROPHENOL	120	120	286
BASE/NEUTRAL COMPOUNDS			·
BENZIDINE	0.08	0.08	0.20
HEXACHLOROBENZENE	0.26	0.26	0.61
HEXACHLOROBUTADIENE	23	31	73
PESTICIDES AND PCBS			
ALDRIN	0.04	0.04	0.10
GAMMA-BHC (LINDANE)	15	20	46
CHLORDANE	0.20	0.20	0.47
4.4'-DDT	0.07	0.09	0.22
4,4'-DDE	0.20	0.20	0.47
4,4'-DDD	0.14	0.18	0.43
DIELDRIN	0.05	0.05	0.12
ENDOSULFAN (TOTAL)	1.01	1.32	3.13
ENDRIN	0.16	0.21	0.51
HEPTACHLOR	0.07	0.07	0.17
PCBS (TOTAL)	0.01	0.01	0.02
TOXAPHENE	0.01	0.05	0.04

V. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

TABLE 9
TECHNOLOGY VS WATER QUALITY STANDARD LIMITATIONS

			WQ STANDARDS-BASED		
			NUMERICAL M	IASS	
			EFFLUENT LIA	art .	
	TECHNOLOGY	TECHNOLOGY	MONTHLY	DAILY	
	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	
	(LB/DAY)	(LB/DAY)	(LB/DAY)	(LB/DAY)	
CHLORINE (GOLDBOOK)					
CHLORINE (TOTAL RES.)	76	125	523	1242	
METALS AND CYANIDE					

PAGE 65

Manganese (T)	B.1.v	ug/L	N
Tin (T)	B.1.w	ug/L	N
Titanium (T)	B.1.x	ug/L	N.
Phenolics (Total Recoverable)	15M	սք/Լ	
METALS AND CYANIDE			<u> </u>
Antimony (T)	IM	ug/L	1
Arsenic (T)	2M	ug/L	1
Beryllium (T)	3M	ug/L	1
Cadmium (T)	4M	ug/L	
Chromium (T)	5M	ug/L	1
Chromium (3+)		ug/L	1
Chromium (6+)	_	ug/L	
Copper (T)	6M	ug/L	59
Lead (T)	7M	սջ/Լ	1 0
Mercury (T)	8M	ug/L	
Nickel (T)	9М	ug/L	359
Selenium (T)	IOM	ug/L	2
Silver (T)	IIM	ug/L	0
Thallium (T)	12M	ug/L	0
Zinc (T)	13M	ug/L	0
Cyanide (T)	14M	ug/L	2
Cyanide (Amenable)		ug/L	2
		1	
DIOXIN			1
2,3.7,8-TCDD	DIOXIN	ug/L	1.00e-05
VOLATILE COMPOUNDS			
Acrolein	IV	ug/L	0
Acrylonitrile	2V	ug/L	0
Benzene	3V	ug/L	0
Bromoform	5V	ug/L	0
Carbon Tetrachloride	6V	ug/L	0
Chlorobenzene	77	ug/L	0
Chlorodibromomethane	8V	ug/L	0
Chloroethane	9V	ug/L	0
2-Chloroethyl Vinyl Ether	107	ug/L	0
Chloroform	117	ug/L	0
Dichlorobromomethane	12V	ug/L	0
1,1-Dichloroethane	14V	ug/L	0
1,2-Dichloroethane	15V	ug/L	0
1,1-Dichloroethylene	16V	ug/L	0
1,2-Dichloropropane	17V	ug/L.	0
1,3-Dichloropropylene	18V	ug/L	0
Ethylbenzene	19V	ug/L	0
Methyl Bromide	20V	ug/L	0

Effluent data values reported less than the MQL values are assigned an absolute value of zero (0) for screening purposes.

Effluent data values reported at or above the MQL values are assigned the absolute value as reported for screening purposes.

TABLE 10 FORM 2C EFFLUENT ANALYSIS FOR OUTFALL 001

FORM 2C DATA			DAILY
	2C NO.	UNITS	MAX
CONVENTIONAL			
BOD5	A. I.a	mg/L	0
TSS	A.I.d	mg/L	52
Oil & Grease	B.1.h	mg/L	0
Fecal Coliform	B.1.d	#/100 ml	0
NONCONVENTIONAL			
Flow	A.1.f	MGD	550
COD	A.I.b	mg/L	0
TOC	A.I.c	mg/L	6
Ammonia (as N)	A.l.c	mg/L	0
Bromide	B. La	ug/L	NA
Chlorine (Total Residual)	B.1.b	ug/L	0
Color	B.1.c	вM	NA
Fluoride	B.1.c	ug/L	0
Nitrate-Nitrite (N)	B.1.f	ug/L	NA
Organic Nitrogen, Total (as N)	B. i.G	ug/L	NA
Phosphorus, Total (as P)	B. 1.i	ug/L	NA
Radioactivity: Alpha, Total	B.1.j.(1)	pCi/L	NA
Radioactivity: Beta, Total	B.1.j.(2)	pÇı∕L	NA
Radioactivity: Radium, Total	B.1.j.(3)	pCi/L	NA
Radioactivity: Radium 226, Total	B.1.j.(4)	pCi/L	NA
Sulfate (as SO4)	B.1.k	ug/L	0
Sulfide (as S)	B.1.i	ug/L	NA
Sulfite: (as SO3)	B.i.m	ug/L	NA
Surfactants	B.I.n	ug/L	NA
Aluminum (T)	B. I.o	ug/L	0
Barium (T)	B. I.p	ug/L	0
Boron (T)	B.I.q	ug/L,	NA
Cobalt (T)	B. l.r	ug/L.	NA
Iron (T)	B.1.s	ug/L	NA
Magnesium (T)	B, 1.1	ug/L	NA
Molybdenum (T)	B,1,u	u g/L	NA

PAGE 67

1,4-Dichlorobenzene	22B	ug/L	
3,3'-Dichlorobenzidine	23B	ug/L.	
Diethyl Phthalate	24B	ug/L	
Dimethyl Phthalate	25B	ug/L	
Di-n-Butyl Phthalate	26B	ug/L	
2,4-Dinitrotoluene	27B	ug/L	
2,6-Dinitrotoluene	28B	ug/L	
Di-n-octyl Phthalate	29B	ug/L.	
1,2-Diphenylhydrazine	30B	ո8/Ր	
Fluoranthene	31B	ug/L	
Fluorene	32B	ug/L	
Hexachlorobenzene	33B	ug/L	
Hexachlorobutadiene	34B	ug/L	
Hexachlorocyclopentadiene	35B	ug/L	1
Hexachloroethane	36B	ug/L	1 7
Indeno (1,2,3-cd) Pyrene	37B	ug/L	
Isophorone	38B	ug/L	
Naphthalene	39B	ug/L	
Nitrobenzene	40B	ug/L	1 0
n-Nitrosodimethylamine	41B	ug/L	0
n-Nitrosodi-n-Propylamine	42B	ug/L	c
n-Nitrosodiphenylamine	43B	ug/L	0
Phenanthrene	44B	ug/L	0
Pyrene	45B	ug/L	1 0
1,2,4-Trichlorobenzene	46B	ug/L	0
			1
PESTICIDES AND PCBs			
Aldrin	1P	ug/L	0
Aipha-BHC	2P	ug/L	0
Beta-BHC	3P	ug/L	0
Gamma-BHC (Lindane)	4P	ug/L	0
Delta-BHC	5P	ug/L	0
Chlordane	6P	ug/L	0
4,4'-DDT	7P	ug/L	0
4,4'-DDE [p,p-DDX]	8P	ug/L	0
4,4'-DDD [p,p-TDE]	9P	ug/L	0
Dieldrin	10P	ug/L	o
Alpha-Endosulfan	HP	ug/L	0
Beta-Endosulfan	12P	ug/L	0
Endosulfan Sulfate	13P	ug/L	0
Endrin	14P	ug/L	0
Endrin Aldehyde	15P	ug/L	0
Heptachior	16P	ug/L	ō
Heptachlor Epoxide	17P	ug/L,	0
PCB-1242	18P	ug/L	0
PCB-1254	19P	ug/L	0

Methyl Chloride	21V	ug/L	0
Methylene Chloride	22V	ug/L	0
1,1,2,2-Tetrachloroethane	23V	ug/L	0
Tetrachloroethylene	24V	ug/L	0
Toluene	25V	ug/L	0
1,2-trans-Dichloroethylene	26V	ug/L	0
1,1,1-Trichloroethane	27V	ug/L	0
1,1,2-Trichloroethane	28V	ug/L	0
Trichloroethylene	29V	ug/L	0
Vinyl Chloride	31V	ug/L	0
ACID COMPOUNDS			
2-Chlorophenol	1A	ug/L	0
2,4-Dichlorophenol	2A	սք/Ն	0
2,4-Dimethyiphenol	3A	ug/L	0
4,6-Dinitro-o-Cresol	4A	ug/L	_0
2,4-Dinitrophenol	5A	ug/L	0
2-Nitrophenol	6A	սց/Լ	0
4-Nitrophenol	7A	ug/L	0
p-Chloro-m-Cresol	8A	118/J.	0
Pentachlorophenol	9A	ug/L	0
Phenol	10A	ug/L	0
2,4,6-Trichlorophenol	11A	ug/L	0
BASE/NEUTRAL COMPOUNDS			
Acenaphthene	18	ug/L	0
Acenaphthylene	2B	ug/L	0
Anthracene	3B	ug/L	0
Benzidine	4B	ug/L	0
Benzo(a)anthracene	5B	ug/L	0
Вепло(а)ругепе	6B	ug/L	D
3,4-Benzofluomnthene	7B	иg/L	0
Benzo(ghi)perylene	88	ug/L	0
Benzo(k)fluoranthene	9B	ug/L	0
Bis(2-chloroethoxy) Methane	10B	ug/L	0
Bis(2-chloroethyl) Ether	HB	ug/L	0
Bis(2-chloroisopropyl) Ether	12B	ug/L	0
Bis(2-ethylhexyl) Phthalate	13B	ug/L	0
4-Bromophenyl Phenyl Ether	14B	ug/L_	0
Butyl Benzyl Phthalate	15B	ug/L	0
2-Chloronapthalene	16B	ug/L	0
4-Chlorophenyl Phenyl Ether	178	ug/L	0
Chrysene	18B	ug/L	0
Dibenzo(a,h)anthracene	19B	սջ/L	0
1,2-Dichlorabenzene	20B	ug/L	0
1.3-Dichlorobenzene	21B	ug/L	0

PAGE 69

Carbon Tetrachloride		0	10	0
Chlorodibromomethane		0	10	이
Chloroform		0	10	0
Dichlorobromomethane		0	10	0
1,2-Dichloroethane		0	10	0
1,1-Dichloroethylene		0	10	0
1,3-Dichloropropylene		0	10	0
Ethylbenzene		0	10	0
Methyl Chloride		0 :	50	0
Methylene Chloride		0 2	20	0
1,1,2,2-Tetrachloroethane		0	0	0
Tetrachloroethylene	(0 1	0	0
Toluene	() 1	0	0
1,1,1-Trichloroethane	() i	o	0
1.1,2-Trichloroethane	() 1		0
Trichloroethylene	C	1		ō
Vinyl Chloride	0	1		0
			1	
ACID COMPOUNDS		 		1
2-Chlorophenot	0	10	1 (히
2,4-Dichlorophenol	0	10		ō
		1		7
BASE/NEUTRAL COMPOUNDS				┪
Benzidine	0	50		7
Hexachlorobenzene	0	10	-	4
Hexachlorobutadiene	0	10		4
			 	1
PESTICIDES AND PCBs		····	├ ┈──	1
Aldrin	0	0.05	0	1
Gamma-BHC (Lindanc)	o	0.05		4
Chlordane	0	0.2		₹ .
4,4'-DDT	0	0.1	0	4
4,4'-DDE	0	0.1	0	4
4,4'-DDD	0	0.1	0	ļ
Dieldrin	0	0.1	0	ĺ
Alpha-Endosulfan	0	0.1		1
Beta-Endosulfan	0	0.1	0	
Endosulfan Sulfate	0	0.1	0	İ
Endosulfan (Total)		0.1		İ
Endrin	0	0,1	0	ĺ
Teptachlor	0	0.05	0	
PCB-1242			- 0	
PCB-1254			0	!
PCB-1221	0		0	
PCB-1232		1	0	
PCB-1248	0	1	0	
+HIV	0	1	0	

PCB-1221	20P	ug/L	0
PCB-1232	21P	ug/L	0
PCB-1248	22P	ug/L	0
PCB-1260	23P	ug/L	0
PCB-1016	24P	ug/L	0
Toxaphene	25P	ug/L	0

TABLE 11 EFFLUENT DATA VS MQL

	DAILY MAXIMUM	MQL	GEO. MEAN
CHLORINE (GOLDBOOK)	(ug/L)	(ug/L)	(ug/L)
Chlorine (TRC)	0	100	0
NONCONVENTIONAL			
Total Phenols (4AAP)	0	5	0
3-Chlorophenol		10	
4-Chlorophenol		10	
2,3-Dichlorophenol		10	
2,5-Dichlorophenol		10	
2,6-Dichlorophenol		10	
3,4-Dichtorophenol		10	
2,4-D		10	
2.4,5-TP (Silvex)		4	
1			
METALS AND CYANIDE			
Arsenic (T)	0	10	0
Cadmium (T)	0	1	0
Chromium (T)	0	10	
Chromium (3+)	0	10	
Chromium (6+)	0	10	ļ
Copper (T)	59	10	ļ
Lead (T)	0	5	
Mercury (T)	0	0.2	
Nickel (T)	359	5	359
Zinc (T)	0	20	
Cyanide (T)	2	20	0
DIOXIN			
2,3,7,8-TCDD	1.00e-05	1.00e-05	0
VOLATILE ORGANICS			
Benzene	0	<u> </u>	
Bromoform	0	10) (

PAGE 71

	I	 	T	
VOLATILE ORGANICS			<u> </u>	
Benzene	3V		(1137
Bromoform	5V	Q		4030
Carbon Tetrachloride	6V	0	C	22
Chlorodibromomethane	87	0	0	403
Chloroform	. 117	0	0	5476
Dichlorobromomethane	12V	0	0	207
1,2-Dichloroethane	15V	0	0	372
1,1-Dichloroethylene	16V	0	0	52
1,3-Dichloropropylene	187	0	0	3637
Ethylbenzene	197	0	0	19207
Methyl Chloride	21V	0	0	330112
Methylene Chloride	22V	0	0	4546
1,1,2,2-Tetrachloroethane	23V	0	0	165
Tetrachloroethylene	24V	0	0	672
Tolucne	25V	0	0	7623
1,1,1-Trichloroethane	27V	0	0	31691
1,1,2-Trichloroethane	28V	0	0	579
Trichloroethylene	29V	0	0	2893
Vinyl Chloride	317	0	. 0	1963
ACID COMPOUNDS				
2-Chlorophenol	IA	0	0	40
2,4-Dichlorophenol	2A	0	0	120
BASE/NEUTRAL COMP	DUNDS			
Benzidine	4B	0	0	0.08
Hexachlorobenzene	33B	0	0	0.26
Hexachlorobutadiene	34B	0	0	31
PESTICIDES AND PCBs				
Aldrin	1P	0	0	0.04
Gamma-BHC (Lindane)	4P	0	0	19.56
Chlordane	6P	o	0	0.20
4,4'-DDT	7P	0	0	0.09
4,4'-DDE	8P	\ 0	0	0.20
4,4'-DDD	9P	0	0	0.18
Dieldrin	10P	0	0	0.05
Endosulfan (Total)		0	0	1.32
Endrin	14P	0	0	0.21
Heptachlor	16P	ō	ō	0.07
PCBs (Total)		Ö	0	0.01
Toxaphene	25P	o	0	0.05

+ PCB-1260	0	1	0
* PCB-1016	0	1	0
PCBs (Total)			0
Toxaphene	0	5	0

The permittee may develop an effluent specific method detection limit (MDL) in accordance with Appendix B to $40\underline{CFR}136$. For any pollutant for which the permittee determines an effluent specific MDL, the permittee shall send to EPA Region 6 a report containing QA/QC documentation, analytical results, and calculations necessary to demonstrate that the effluent specific MDL was correctly calculated. An effluent specific minimum quantification level (MQL) shall be determined in accordance with the following calculation:

$$MQL = 3.3 \times MDL$$

Upon written approval by EPA Region 6, the effluent specific MQL may be utilized by the permittee for all future Discharge Monitoring Report (DMR) calculations and reporting requirements.

TABLE 12
95th PERCENTILE EFFLUENT VS END OF PIPE WATER QUALITY STANDARDS

				WQ CONC.
	FORM	GEOMETRIC	95%TILE	MONTHLY
	2C	MEAN	VALUE	AVERAGE
	NUMBER	(ug/L)	(ug/L)	(ug/L)
CHLORINE (GOLDBO	OK)			-
Chlorine (Total Res.)	В.1.Ь	0	0	114
NONCONVENTIONAL	<u> </u>			
Total Phenols (4AAP)	15M	0	0	2003
METALS AND CYANI	DE.			
Arsenic (T)	1M	0	0	2161
Cadmium (T)	4M	0	0	146
Chromium (3+)		0	0	14647
Chromium (6+)		0	0	96
Copper (T)	6M	59	125.67	170
Lead (T)	7M	0	0	503
Mercury (T)	8M	0	0	1.12
Nickel (T)	9M	359	765	12097
Zinc (T)	13M	0	0	999
Cyanide (T)	14M	0	0	275
DIOXIN				
2,3,7,8-TCDD	DIOXIN	0	0	7.34e-04

with regulations promulgated at 40CFR122.48.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the test method publication mentioned in the previous paragraph. This full report need not be submitted unless requested. However, the full report is to be retained for three (3) years following the provisions of Part III.C.3 of this permit. The permit requires the submission of certain toxicity testing information as an attachment to the Discharge Monitoring Report.

This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of 40CFR124.5. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

DILUTION SERIES

The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 0.10%, 0.07%, 0.06%, 0.05%, and 0.03% based on a 0.75 dilution series with the low-flow effluent concentration (critical low-flow dilution) defined as 0.07% effluent. The effluent dilution series are calculated in Table 14.

TABLE 14
EFFLUENT DILUTION SERIES BASED ON 0.75 DILUTION SERIES

Dilution No. 1	0.2357
Dilution No. 2	0.1767
Dilution No. 3	0.1326
Dilution No. 4	0.0994
Dilution No. 5	0.0746

PAGE 72

IV BIOMONITORING REQUIREMENTS

The provisions of this section apply to Final Outfall(s) 001.

EPA has determined that there may be pollutants present in the effluent(s) which have the reasonable potential to cause, or contribute to, an instream excursion above the narrative criterion within the applicable State water quality standards in violation of Section 101(a)(3) of the Clean Water Act. In addition, EPA is required under 40<u>CFR</u>122.44(d)(1) to include conditions as necessary to achieve the States' water quality standards as established under Section 303 of the Clean Water Act. The State has established narrative criteria which, in part, state that "toxic substances shall not be present in quantities that alone or in combination will be toxic to plant or animal life"

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity.

TESTING AND REPORTING REQUIREMENTS

The draft permit establishes the following testing and reporting requirements:

TABLE 13 BIOMONITORING SAMPLING AND FREQUENCY

TOXICITY TESTS

FREOUENCY

Acute static renewal 48-hour definitive toxicity test using

1/Quarter

Daphnia pulex

Acute static renewal 48-hour definitive toxicity test using

1/Quarter

fathead minnow (Pimephales promelas)

Toxicity tests shall be performed in accordance with protocols described in the latest revision of the "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fourth Edition, EPA/600/4-90/027, September 1991." The stipulated test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards.

The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge in accordance

RESPONSE TO COMMENTS APPENDIX OUTFALL 531 (INTERNAL)

PAGE 75

CALCULATION OF TECHNOLOGY-BASED EFFLUENT LIMITATIONS

FLOW INFORMATION: FORM 2C APPLICATION

		E+6
OCPSF PROCESS WASTE WATERS	MGD	LB/DAY
HCL Scrubber Effluent	2.26	18.85
HCL Scrubber Effluent	0.50	4.20
Steam Stripper	0.43	3.60
Maintenance Water	0.06	0.50
OCPSF FLOW	3.26	27.16
MISCELLANEOUS WASTEWATER		
Once Through Cooling River	7.74	64.55
Maintenance Water	0.06	0.50
HCL Tank Vent Scrubber	0.07	0.60
MISCELLANEOUS FLOW	7.87	65.65
		E+6
STREAM CATEGORY SUMMARY	MGD	LB/DAY
OCPSF Process Wastewater	3.26	27.16
Miscellaneous Wastewater	7.87	65.65
TOTAL FLOW	11.13	92.81

OUTFALL 101 (INTERNAL)

CALCULATION OF TECHNOLOGY-BASED EFFLUENT LIMITATIONS

FLOW INFORMATION: FORM 2C APPLICATION

		E+6
OCPSF PROCESS WASTE WATERS	MGD	LB/DAY
Process Area Reaction Water	1.46	12.18
Process Area Contact Stormwater	0.072	0.60
Scrubber Effluent	0.002	0.02
OCPSF FLOW	1.53	12.79
		E+6
STREAM CATEGORY SUMMARY	MGD	LB/DAY
OCPSF FLOW	1.53	12.79
TOTAL FLOW	1.53	12.79

	SUBPART
	FRACTION
	OF TOTAL
	OCPSF
40 CFR PART 414 SUBPART CATEGORY	PRODUCT
Subpart D - Thermoplastic Resins	_ 1

^{*} Daily Average Limitations for TSS and Chloroform are based on the approved Fundamentally Different Factors Variance Request in lieu 40 CFR 414 Subpart D and Subpart J.

PAGE 77

	SUBPART		
	FRACTION	414	WEIGHTEI
	OF TOTAL	DAILY	DAILY
	OCPSF	AVERAGE	AVERAGE
TSS AVERAGE	PRODUCT	(mg/L)	(mg/L)
Subpart F - Commodity Organic Chemicals	0.88		
Subpart G - Bulk Organic Chemicals	0.12	2 49	·
		TOTAL	46.36
	SUBPART		
	FRACTION	414	WEIGHTED
	OF TOTAL	DAILY	DAILY
	OCPSF	MAXIMUM	MAXIMUM
TSS MAXIMUM	PRODUCT	(mg/L)	(mg/L)
Subpart F - Commodity Organic Chemicals	0.88	149	131.12
Subpart G - Bulk Organic Chemicals	0.12	159	19.08
		TOTAL	150.2

CALCULATION OF BOD5 AND TSS LIMITATIONS

Permit Limitation = Concentration Limitation(mg/L) • Flow E+6(lb/day)

FRACTION OF OCPSF CONCENTRAT	TIONS		,	T	T T
	BOD5	BOD5	TSS	TSS	
	MONTHLY	DAILY	MONTHLY	DAILY	
UTIL/MISC BPJ CONC.	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	·
Once Through River Water	0	Ò	42		
CALCULATE BODS LIMITS					
		MONTHLY	DAILY	MONTHLY	DAILY
	E+6	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM
STREAM CATEGORY	LB/DAY	mg/L	mg/L	LB/DAY	LB/DAY
OCPSF Process Wastewater	27.155	30.48	81.44		
Once Through River Water	65.652	0	0	0	0
		TOTAL		828	2211.5

PAGE 76

OCPSF SUBPART INFORMATION: FORM 2C APPLICATION

	SUBPART
	FRACTION
	OF TOTAL
	OCPSF
40 CFR PART 414 SUBPART CATEGORY	PRODUCT
Subpart F - Commodity Organic Chemicals	0.88
Subpart G - Bulk Organic Chemicals	0.12

BOD5 AND TSS REQUIREMENTS

	SUBPART		
	FRACTION	414	WEIGHTED
	OF TOTAL	DAILY	DAILY
	OCPSF	AVERAGE	AVERAGE
BOD5 AVERAGE	PRODUCT	(mg/L)	(mg/L)
Subpart F - Commodity Organic Chemicals	0.88	30	26.4
Subpart G - Bulk Organic Chemicals	0.12	34	4.08
		TOTAL	30.48
	SUBPART		
·	FRACTION	414	WEIGHTED
	OF TOTAL	DAILY	DAILY
	OCPSF	MAXIMUM	MAXIMUM
BODS MAXIMUM	PRODUCT	(mg/L)	(mg/L)
Subpart F - Commodity Organic Chemicals	0.88	80	70.4
Subpart G - Bulk Organic Chemicals	0.12	92	11.04
		TOTAL	81.44
	1		

PAGE 79

*						
ACID COMPOUNDS						<u> </u>
2,4-DIMETHYLPHENOL	34606	27.153	5	19	47 0.5	52 1.2
4,6-DINITRO-O-CRESOL	34657	27.155			77 2.1	
2,4-DINITROPHENOL	34616	27.155				
2-NITROPHENOL	34591	27.155			31 1.7	
4-NITROPHENOL	34646	27.155	 		76 4	
PHENOL	34694	27.155			7 0.5	
		1		`	0.3	2 1 28
BASE/NEUTRAL COMPOUNDS	-					
ACENAPHTHENE	34205	27.155	1	0 4	7 0.5	1 100
ACENAPHTHYLENE	34200	27.155	<u> </u>			
ANTHRACENE	34220	27.155	1	-		
BENZO(A)ANTHRACENE	34526	27.155	15	 		
BENZO(A)PYRENE	34247	27.155	20			
3,4-BENZOFLUORANTHENE	34230	27.155	20	-		
BENZO(K)FLUORANTHENE	34242	27,155	19			
BIS(2-ETHYLHEXYL)PHTHALATE		27.155	95			
CHRYSENE	34320	27.155	19			
1,2-DICHLOROBENZENE	34536	27.155	196			
,3-DICHLOROBENZENE	34566	27.155	142	·		
,4-DICHLOROBENZENE	34571	27.155	142			<u> </u>
DIETHYL PHTHALATE	34336	27.155	46			10.32
DIMETHYL PHTHALATE	34341	27.155	19		 	
DI-N-BUTYL PHTHALATE	39110	27.155	20			
LUORANTHENE	34376	27.155	22			1.17
LUORENE	34381	27.155	19	. 54		1.47
IEXACHLOROBENZENE	39700	27.155	196	47		1.28
EXACHLOROBUTADIENE	34391	27.155	142	794	5.32	21.56
EXACHLOROETHANE	34396	27.155		380	3.86	10.32
APHTHALENE	34696		196	794	5.32	21.56
ITROBENZENE	34447	27.155	19	47	0.52	1.28
HENANTHRENE	34461	27.155	2237	6402	60.75	173.85
YRENE	34469	27.155	19	47	0.52	1.28
2,4-TRICHLOROBENZENE		27.155	20	48	0.54	1.3
	34551	27.155	196	794	5 32	21.56

CALCULATE TSS LIMITS					
	FLOW	MONTHLY	DAILY	MONTHLY	DAILY
	E+6		MAXIMUM	AVERAGE	MAXIMUM
STREAM CATEGORY	LB/DAY	mg/L	mg/L	LB/DAY	LB/DAY
OCPSF Process Wastewater	27.155	46.36	150.2	1258.9	4078.7
Once Through River Water	65.652	42	42	2757.4	2757.4
		TOTAL		4016.3	6836.1
PERMIT LIMITS					
		MONTHLY	DAILY		
	STORET	AVERAGE	MAXIMUM		
CONVENTIONAL POLLUTANTS	NUMBER	LB/DAY	LB/DAY_		
BOD5	00310	828	2212		
TSS	00530	4016	6836	[

CALCULATION OF TOXIC ORGANIC PERMIT LIMITATIONS

Permit Limitation = Concentration Limitation(ug/L) * 0.001 * Flow E+6(lb/day)

		FLOW	MONTHLY	DAILY	MONTHLY	DAILY
	STORET	E+6	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM
VOLATILE COMPOUNDS	NUMBER	LB/DAY	ug/L	ug/L	LB/DAY	LB/DAY
ACRYLONITRILE	34215	27.155	94	232	2,55	6.3
BENZENE	34030	27.155	57	134	1.55	3.64
CARBON TETRACHLORIDE	32102	27.155	142	380	3.86	10.32
CHLOROBENZENE	34301	27,155	. 142	380		10.32
CHLOROETHANE	34311	27.155	110	295	2.99	8.01
CHLOROFORM	32106	27.155	111	325	3.01	8.83
1,1-DICHLOROETHANE	34496	27.155	22	59		1.6
1,2-DICHLOROETHANE	34531	27.155	180	574	4.89	
I,1-DICHLOROETHYLENE	34501	27.155	22	60	0.6	
1,2-DICHLOROPROPANE	34541	27.155	196	794	5.32	
1,3-DICHLOROPROPYLENE	34561	27.155	196	794	5.32	<u> </u>
ETHYLBENZENE	34371	27.155	142	380	3.86	
METHYL CHLORIDE	34418	27.155	110	295		
METHYLENE CHLORIDE	34423	27.155	36	170	0.98	
TETRACHLOROETHYLENE	34475	27,155	52	164	1.41	
TOLUENE	34010	27.155	28	74	0.76	
1,2-TRANS-DICHLOROETHYLENE	34546	27.155	25	66	0.68	
I,I,I-TRICHLOROETHANE	34506	27.155	22	59	0.6	1.6
1,1,2-TRICHLOROETHANE	34511	27.155	32	127	0.87	
TRICHLOROETHYLENE	39180	27.155	26	69	0.71	
VINYL CHLORIDE	39175	27.155	97	17,	2.63	4.67
		<u> </u>	<u></u>		<u> </u>	<u></u>

PAGE 81

OCPSF SUBPART INFORMATION: F	FORM 2C APPLICATION
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	SUBPART
	FRACTION
	OF TOTAL
	OCPSF
40 CFR PART 414 SUBPART CATEGORY	PRODUCT
Subpart G - Bulk Organic Chemicals	1

BOD5 AND TSS REQUIREMENTS

SUBPART			
FRACTION	414	WEIGHTED	
OF TOTAL	DAILY	DAILY	
OCPSF	AVERAGE	AVERAGE	
PRODUCT	(mg/L)	(mg/L)	
	34	3	
		·	
	TOTAL	3	
SUBPART		<u> </u>	
FRACTION	414	WEIGHTED	
OF TOTAL	DAILY	DAILY	
OCPSF	MAXIMUM	MAXIMUM	
PRODUCT	(mg/L)	(mg/L)	
1	92	9:	
	TOTAL	97	
SURPART			
	414	WEIGHTED	
		DAILY	
OCPSF		AVERAGE	
PRODUCT		(mg/L)	
	49	(ing/L) 49	
	TOTAL	49	
	FRACTION OF TOTAL OCPSF PRODUCT SUBPART FRACTION OF TOTAL OCPSF PRODUCT I SUBPART FRACTION OF TOTAL OCPSF PRODUCT OCPSF PRODUCT OCPSF PRODUCT OCPSF OCCUPANT OCPSF OCCUPANT OCPSF OCCUPANT	FRACTION 414 OF TOTAL DAILY OCPSF AVERAGE PRODUCT (mg/L) 1 34 TOTAL SUBPART FRACTION 414 OF TOTAL DAILY OCPSF MAXIMUM PRODUCT (mg/L) 1 92 TOTAL SUBPART FRACTION 414 OF TOTAL OCPSF MAXIMUM PRODUCT (mg/L) 1 92	



RESPONSE TO COMMENTS APPENDIX OUTFALL 1521 (INTERNAL)

PAGE 80

CALCULATION OF TECHNOLOGY-BASED EFFLUENT LIMITATIONS

FLOW INFORMATION: FORM 2C APPLICATION

		E+6
OCPSF PROCESS WASTE WATERS	MGD	LB/DAY
Thermal Treatment Unit	0.19	1.5846
Maintenance Water	0.04	0.3336
Process Area Contact Stormwater	0.44	3.6696
OCPSF FLOW	0.67	5.5878
UTILITY WASTEWATER		
Cooling Tower Blowdown	0.03	0.2502
UTILITY FLOW	0.03	0.2502
		E+6
STREAM CATEGORY SUMMARY	MGD	LB/DAY
OCPSF Process Wastewater	0.67	5.5878
Utility Wastewater	0.03	0.2502
TOTAL FLOW	0.7	, 5.838

PAGE 83

CALCULATION OF TOXIC ORGANIC PERMIT LIMITATIONS

Permit Limitation = Concentration Limitation(ug/L) * 0.001 * Flow E+6(lb/day)

		FLOW	MONTHLY	DAILY	MONTHLY	DAILY
	STORET	E+6	AVERAGE	MAXIMUM		
VOLATILE COMPOUNDS	NUMBER	LB/DAY		mg/L	LB/DAY	LB/DAY
ACRYLONITRILE	34215	5.5878	94		0.53	1.
BENZENE	34030	5.5878	57	134	0.32	0.7
CARBON TETRACHLORIDE	32102	5.5878		380	0.79	2,1
CHLOROBENZENE	34301	5.5878		380	0.79	2,1
CHLOROETHANE	34311	5.5878	110	295	0.61	1.6
CHLOROFORM	32106	5.5878	111	325	0.62	1.8
I,I-DICHLOROETHANE	34496	5.5878	22	59	0.12	0.3
1,2-DICHLOROETHANE	34531	5.5878	180	574	1.01	3.2
1,1-DICHLOROETHYLENE	34501	5.5878	22	60	0.12	0.34
1,2-DICHLOROPROPANE	34541	5.5878	196	794	1.1	4.44
1,3-DICHLOROPROPYLENE	34561	5.5878	196	794	1.1	4,44
ETHYLBENZENE	34371	5.5878	142	380	0.79	2.12
METHYL CHLORIDE	34418	5.5878	110	295	0.61	1.65
METHYLENE CHLORIDE	34423	5.5878	36	170	0.2	0.95
TETRACHLOROETHYLENE	34475	5.5878	52	164	0.29	0.92
TOLUENE	34010	5.5878	28	74	0.16	0.41
,2-TRANS-DICHLOROETHYLENE	34546	5.5878	25	66	0.14	0.47
,1,1-TRICHLOROETHANE	34506	5.5878	22	59	0.12	0,33
,1,2-TRICHLOROETHANE	34511	5.5878	32	127	0.18	0.71
RICHLOROETHYLENE	39180	5.5878	26	69	0.15	0.39
/INYL CHLORIDE	39175	5.5878	97	172	0.54	0.96
CID COMPOUNDS						
,4-DIMETHYLPHENOL	34606	5.5878	19	47	0.11	0.26
6-DINITRO-O-CRESOL	34657	5.5878	78	277	0.44	1.55
4-DINITROPHENOL	34616	5.5878	1207	4291	6.74	23.98
NITROPHENOL	34591	5.5878	65	231	0.36	1.29
NITROPHENOL	34646	5.5878	162	576	0.91	3.22
HENOL	34694	5.5878	19	47	0.11	0.26
ACCAMO						
ASE/NEUTRAL COMPOUNDS						
CENAPHTHENE	34205	5.5878	19	47	0.11	0.26
CENAPHTHYLENE	***************************************	5.5878	19	47	0.11	0.26
NTHRACENE		5.5878	19	47	0.11	0.26
NZO(A)ANTHRACENE		5.5878	19	47	0.11	0.26
ENZO(A)PYRENE		5.5878	20	48	0.11	0.27
I-BENZOFLUORANTHENE	*****	5.5878	20	48	0.11	0.27
ENZO(K)FLUORANTHENE		5.5878	19	47	0.11	0.26
S(2-ETHYLHEXYL)PHTHALATE	39100	5.5878	95	258	0.53	1.44

PAGE 82

	SUBPART		
	FRACTION	414	WEIGHTED
	OF TOTAL	DAILY	DAILY
	OCPSF	MAXIMUM	MAXIMUM
TSS MAXIMUM	PRODUCT	(mg/L)	(mg/L)
Subpart G - Bulk Organic Chemicals	1	159	159
		TOTAL	159

CALCULATION OF BOD5 AND TSS LIMITATIONS

Permit Limitation = Concentration Limitation(mg/L) * Flow E+6(lb/day)

FRACTION OF OCPSF CONCENTRATIONS				
CALCULATE BODS LIMITS				
	FLOW	MONTHLY	DAILY	
	E+6		MAXIMUM	
STREAM CATEGORY	LB/DAY	mg/L	mg/L	
OCPSF Process Wastewater	5.5878	34	92	
CALCULATE TSS LIMITS				
	FLOW	MONTHLY		
	E+6	AVERAGE	MAXIMUM	
STREAM CATEGORY	LB/DAY	mg/L	mg/L	
OCPSF Process Wastewater	5.5878	49	159	 <u> </u>
PERMIT LIMITS				
		MONTHLY	DAILY	
	STORET	AVERAGE	MAXIMUM	 <u> </u>
CONVENTIONAL POLLUTANTS	NUMBER	MG/L	MG/I	
BODS	00310	34	92	
TSS	00530	49	159	

PAGE 85

OUTFALL 1711 (INTERNAL)

CALCULATION OF TECHNOLOGY-BASED EFFLUENT LIMITATIONS

FLOW INFORMATION: FORM 2C APPLICATION

		E+6
OCPSF PROCESS WASTE WATERS	MGD	LB/DAY
Process Area Contact Stormwater	0.38	3.1692
Chlorine Scrubber Water	1.85	15.429
OCPSF FLOW	2,23	18.5982
UTILITY WASTEWATER		
Cooling Tower Blowdown	0.1	0.834
UTILITY FLOW	0.1	0.834
MISCELLANEOUS WASTEWATER		0.051
Incinerator Scrubber Water		
Recovered Groundwater	1.2	10.008
Accovered Groundwarer	0.08	0.6672
MISCELLANEOUS FLOW	1.4	11.676
		E+6
STREAM CATEGORY SUMMARY	MGD	LB/DAY
OCPSF Process Wastewater	2.23	18.5982
Utility Wastewater	0.1	0.834
Miscellaneous Wastewater	1.4	0.834
TOTAL FLOW	3.73	20,2662

PAGE 84

CHRYSENE	34320	5.5878	19	47	0.11	0.26
1,2-DICHLOROBENZENE	34536	5.5878	196	794	1.1	4.44
1,3-DICHLOROBENZENE	34566	5.5878	142	380	0.79	2.12
1,4-DICHLOROBENZENE	34571	5.5878	142	380	0.79	2.12
DIETHYL PHTHALATE	34336	5.5878	46	113	0.26	0.63
DIMETHYL PHTHALATE	34341	5.5878	19	47	0.11	0.26
DI-N-BUTYL PHTHALATE	39110	5.5878	20	43	0.11	0.24
FLUORANTHENE	34376	5.5878	22	54	0.12	0.3
FLUORENE	34381	5.5878	19	47	0.11	0.26
HEXACHLOROBENZENE	39700	5.5878	196	794	1.1	4.44
HEXACHLOROBUTADIENE	34391	5.5878	142	380	0.79	2.12
HEXACHLOROETHANE	34396	5.5878	196	794	1.1	4.44
NAPHTHALENE	34696	5.5878	19	47	0.11	0.26
NITROBENZENE	34447	5.5878	2237	6402	12.5	35.77
PHENANTHRENE	34461	5.5878	19	47	0.11	0.26
PYRENE	34469	5.5878	20	48	0.11	0.27
1,2,4-TRICHLOROBENZENE	34551	5 5878	196	794	1.1	4.44

PAGE 87

	SUBPART		
	FRACTION	414	WEIGHTED
	OF TOTAL	DAILY	DAILY
	OCPSF	MAXIMUM	MAXIMUM
TSS MAXIMUM	PRODUCT	(mg/l.)	(mg/L)
Subpart F - Commodity Organic Chemicals	1:	149	149
		TOTAL	149

CALCULATION OF BOD5 AND TSS LIMITATIONS

Permit Limitation = Concentration Limitation(mg/L) * Flow E+6(lb/day)

	7	T	1	т	<u> </u>
FRACTION OF OCPSF CONCENTRATIONS		┪	-		
	BOD5	BOD5	TSS	TSS	
	MONTHL	Y DAILY	MONTHLY	DAILY	
UTIL/MISC BPJ CONC.	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	.
Utility Wastewater	0.2			· · · · · · · · · · · · · · · · · · ·	
Miscellaneous Wastewater		t i	0.2		
CALCULATE BODS LIMITS					
	FLOW	MONTHLY	DAILY	MONTHLY	DAILY
	E+6	AVERAGE	MAXIMUM	AVERAGE	MAXIMUN
STREAM CATEGORY	LB/DAY	mg/L	mg/L	LB/DAY	LB/DAY
OCPSF Process Wastewater	18.598	30	80	557.95	1487.
Jtility Wastewater	0.834	7.5	20	6.255	16.6
Miscellaneous Wastewater	11.676	30	80	350.28	·····
		TOTAL	===>	914.48	2438.0
CALCULATE TSS LIMITS					
	FLOW	MONTHLY	DAILY	MONTHLY	DAILY
	E+6	AVERAGE			
TREAM CATEGORY	LB/DAY	mg/L	mg/L	LB/DAY	LB/DAY
CPSF Process Wastewater	18.598	<u> </u>	149	855.52	2771.1
tility Wastewater	0.834	11.5	37.25	9.591	31.066
liscellaneous Wastewater	11.676	11.5	37.25	134.27	434.93
		TOTAL		000.00	
		TOTAL		999.38	3237.1

OCPSF SUBPART INFORMATION: FORM 2C APPLICATION

	SUBPART
	FRACTION
	OF TOTAL
	OCPSF
40 CFR PART 414 SUBPART CATEGORY	PRODUCT
Subpart F - Commodity Organic Chemicals	1

BOD5 AND TSS REQUIREMENTS

	SUBPART			
	FRACTION	414	WEIGHTED	
	OF TOTAL	DAILY	DAILY	
	OCPSF	AVERAGE	AVERAGE	
BOD5 AVERAGE	PRODUCT	(mg/L)	(mg/L)	
Subpart F - Commodity Organic Chemicals	l l		30	
		TOTAL		
	SUBPART			
	FRACTION	414	WEIGHTED	
	OF TOTAL DAILY		DAILY	
	OCPSF	MAXIMUM	MAXIMUM	
BODS MAXIMUM	PRODUCT	(mg/L)	(mg/L)	
Subpart F - Commodity Organic Chemicals	1	80	8(
		TOTAL	8(
	SUBPART			
	FRACTION	414	WEIGHTED	
	OF TOTAL	DAILY	DAILY	
	OCPSF	AVERAGE	AVERAGE	
TSS AVERAGE	PRODUCT	(mg/L)	(mg/L)	
Subpart F - Commodity Organic Chemicals]	46	4	
		TOTAL	4	

PAGE 88

PERMIT LIMITS		MONTHLY	DAILY	
	STORET	AVERAGE	MAXIMUM	
CONVENTIONAL POLLUTANTS	NUMBER	LB/DAY	LB/DAY	
BOD5	00310	914	2439	
TSS	00530	999	3237	

CALCULATION OF TOXIC ORGANIC PERMIT LIMITATIONS

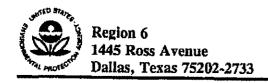
Permit Limitation = Concentration Limitation(ug/L) * 0.001 * Flow E+6(lb/day)

	<u> </u>	FLOW	MONTHLY		MONTHLY	
	STORET	E+6	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM
VOLATILE COMPOUNDS	NUMBER	LB/DAY	UG/L	UG/L	LB/DAY	LB/DAY
ACRYLONITRILE	34215	18.598	94	232	1.75	4.31
BENZENE	34030	18.598	57	134	1.06	2.49
CARBON TETRACHLORIDE	32102	18.598	142	380	2.64	7.07
CHLOROBENZENE	34301	18 598	142	380	2.64	7.07
CHLOROETHANE .	34311	18.598	110	295	2.05	5.49
CHLOROFORM	32106	18,598	111	325	2.06	6 04
1,1-DICHLOROETHANE	34496	18.598	22	59	0.41	1.1
1,2-DICHLOROETHANE	34531	18.598	180	574	3.35	10.68
1,1-DICHLOROETHYLENE	34501	18.598	22	60	0.41	1.12
1,2-DICHLOROPROPANE	34541	18.598	196	794	3.65	14.77
I,3-DICHLOROPROPYLENE	34561	18.598	196	794	3.65	14,77
ETHYLBENZENE	34371	18.598	142	380	2.64	7.07
METHYL CHLORIDE	34418	18.598	110	295	2.05	5.49
METHYLENE CHLORIDE	34423	18.598	36	170	0.67	3,16
TETRACHLOROETHYLENE	34475	18.598	52	164	0.97	3.05
TOLUENE	34010	18.598	28	74	0.52	1.38
1,2-TRANS-DICHLOROETHYLENE	34546	18.598	25	66	0.46	1.23
I,1,I-TRICHLOROETHANE	34506	18.598	22	59	0.41	1.1
1,1,2-TRICHLOROETHANE	34511	18.598	32	127	0.6	2.36
FRICHLOROETHYLENE	39180	18.598	26	69	0.48	1.28
VINYL CHLORIDE	39175	18.598	97	172	1.8	3.2
ACID COMPOUNDS			······································			
,4-DIMETHYLPHENOL	34606	18.598	19	47	0.35	0.87
,6-DINITRO-O-CRESOL	34657	18.598	78	277	1.45	5.15
,4-DINITROPHENOL	34616	18.598	1207	4291	22.45	79.8
-NITROPHENOL	34591	18.598	65	231	1.21	4.3
-NITROPHENOL	34646	18.598	162	576	3.01	10.71
HENOL	34694	18.598	19	47	0.35	0.87
		- 1		- '	0.55	0.07
ASE/NEUTRAL COMPOUNDS			·			
CENAPITHENE	34205	18.598	19	47	0.35	0.87

PAGE 89

RESPONSE TO COMMENTS APPENDIX

ACENAPHTHYLENE	34200	18.598	19	47	0.35	0.87
ANTHRACENE	34220	18.598	19	47		0.87
BENZO(A)ANTHRACENE	34526	18.598	19	47	0.35	0.87
BENZO(A)PYRENE	34247	18.598	20	48	0.37	0.89
3,4-BENZOFLUORANTHENE	34230	18,598	20	48	0.37	0.89
BENZO(K)FLUORANTHENE	34242	18.598	19	47	0.35	0.87
BIS(2-ETHYLHEXYL)PHTHALATE	39100	18.598	95	258	1.77	4.8
CHRYSENE	34320	18.598	19	47	0.35	0.87
1,2-DICHLOROBENZENE	34536	18.598	196	794	3.65	14.77
1,3-DICHLOROBENZENE	34566	18.598	142	380	2.64	7.07
I,4-DICHLOROBENZENE	34571	18.598	142	380	2.64	7.07
DIETHYL PHTHALATE	34336	18.598	46	113	0.86	2.1
DIMETHYL PHTHALATE	34341	18.598	19	47	0.35	0.87
DI-N-BUTYL PHTHALATE	39110	18.598	20	43	0.37	0.8
FLUORANTHENE	34376	18.598	22	54	0.41	1
FLUORENE	34381	18.598	19	47	0.35	0.87
HEXACHLOROBENZENE	39700	18.598	196	794	3.65	14.77
HEXACHLOROBUTADIENE	34391	18.598	142	380	2.64	7.07
HEXACHLOROETHANE	34396	18.598	196	794	3.65	14.77
NAPHTHALENE	34696	18.598	19	47	0.35	0.87
NITROBENZENE	34447	18.598	2237	6402	41.6	119.07
PHENANTHRENE	34461	18.598	19	47	0.35	0.87
PYRENE	34469	18.598	20	48	0.37	0.89
1,2,4-TRICHLOROBENZENE	34551	18.598	196	794	3.65	14.77



NPDES Permit No. LA0003301

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the "Act"),

DOW U.S.A.

The Dow Chemical Company

P.O. Box 150

Plaquemine, Louisiana 70765-0150

is authorized to discharge from a facility located LA Hwy 1, Iberville/West Baton Rouge Parish, Plaquemaine, Louisiana 70765-0150

to receiving waters named Mississippi River, Waterbody Segment Code No. 070301 of the Mississippi River Basin from

Final Outfall 001: Final Outfall 002:

in accordance with this cover page and the effluent limitations, monitoring requirements, and other conditions set forth in Parts I [Requirements for NPDES Permits - 137 pages], II [Other Conditions - 15 pages], and III [Standard Conditions for NPDES Permits - 7 pages] hereof.

This permit supersedes and replaces NPDES Permit No. LA0003301 issued June 17, 1988.

This permit shall become effective on Marc

March 1, 2002

This permit and the authorization to discharge shall expire at midnight, November 30, 2006

Issued on October 12, 2001

Prepared by

Gregg A. Cooke

Regional Administrator

Brian W. Mueller

NPDES Permits Branch (6WQ-P)

PART I - REQUIREMENTS FOR NPDES PERMITS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

OUTFALL 001(FINAL)

Discharge Type: Continuous

Latitude - 30°18'45"N; Longitude - 91°14'00"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge process, utility, stormwater, sanitary and other miscellaneous wastewaters to Mississippi River.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER	L		}			
	STORET	MONTHLY	DAILY	1	SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
pH RANGE EXCURSIONS 1/	82581	NA	0	3/	CONTINUOUS	RECORDER
pH RANGE EXCURSIONS 2/	82582	NA	446	3/	CONTINUOUS	RECORDER
pH <u>4</u> /	00400	NA	N _A	S.U.	CONTINUOUS	RECORDER
NONCONVENTIONAL				<u> </u>		
Flow (MGD)	50050	REPORT	REPORT	MGD	CONTINUOUS	PUMP CURVE
BASE/NEUTRAL COMPOUNDS						
Hexachiorobenzene	39700	1.18	2.82	LB/DAY	I/WEEK	24-HR COMPOSITE
WHOLE EFFLUENT TOXICITY		MONTHLY	48-HR			
TESTING		AVERAGE	MINIMUM			<u> </u>
48-Hr. Static Renewal		MINIMUM	5/	QUALITY		
Pimephales prometas	TEM6C	NA	REPORT	%	I/QUARTER	24-HR COMPOSITE
Pimephales promelas	ТОМ6С	NA	REPORT	%	1/QUARTER	24-HR COMPOSITE
Daphnia pulex	TEM3D	NA	REPORT	%	1/QUARTER	24-HR COMPOSITE
Daphnia pulex	TOM3D	NA	REPORT	%	I/QUARTER	24-HR COMPOSITE

PAGE 2 OF PART I

PERMIT NO. LA0003301

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Final Outfall 001 prior to discharge to Mississippi River..

DEFINITIONS

The term "runoff" shall mean the flow of stormwater resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

The term "uncontaminated runoff" shall mean runoff which does not come into contact (other than incidental) with any raw material, intermediate product, finished product, by-product, or waste product located on the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the <u>NO DISCHARGE</u> box located in the upper right corner of the Discharge Monitoring Report.

FLOATING SOLIDS OR VISIBLE FOAM

There shall be no discharge of floating solids or visible foam in other than trace amounts.

FLOW MEASUREMENTS

"Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. The daily flow value may be estimated using best engineering judgment.

PERMIT NO. LA0003301

FOOTNOTES:

- 1/ Occurrences per month greater than 60 minutes.
- 2/ Monthly accumulated time in minutes.
- 3/ The pH shall be within the range of 6.0 to 9.0 standard units at all times subject to the following continuous monitoring pH range excursion provisions.

DH RANGE EXCURSION PROVISIONS

Where a permittee continuously measures the pH of wastewater pursuant to a requirement or option in a National Pollutant Discharge Elimination System (NPDES) permit issued pursuant to Section 402 of the Clean Water Act, the permittee shall maintain the pH of such wastewater within the range set forth in the permit, except excursions from the range are permitted, provided:

- (a) The total time during which the pH values are outside the required range of pH values shall not exceed 446 minutes in any calendar month; and,
- (b) No individual excursion from the range of pH values shall exceed 60 minutes.

For purposes of this section, an "excursion" is an unintentional and temporary incident in which the pH value of discharge wastewater exceeds the range set forth in the permit.

- 4/ The permittee shall report the monthly minimum and monthly maximum pH
- 5/ Species Quality Reporting Units: Pass = 0, Fail = 1
- The summation of the mass loading of hexachlorobenzene for Internal Outfalls (101, 531, 741, 911, 931, 1031, 1041, 1051, 1521, 1531, 1711, 3121, & 2001) shall not exceed 1.18 lbs/day daily average and 2.82 lbs/day daily maximum. This requirement is only in effect when the permittee is sampling for hexachlorobenze at Internal Outfalls (101, 531, 741, 911, 931, 1031, 1041, 1051, 1521, 1531, 1711, 3121, & 2001) as required by the conditions for those outfalls..

OUTFALL 101 (INTERNAL)

Discharge Type: Continuous

Latitude 30°19'15"N, Longitude 91°13'45"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge process wastewater from the manufacture of chlorinated polyethylene to Outfall 001.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER				1		
	STORET	MONTHLY	DAILY	[SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	ТҮРЕ
BOD5	00310	307	819	LB/DAY	1/MONTH	24-HR COMPOSITE
TSS	00530	1458	1663	LB/DAY	2/WEEK	24-HR COMPOSITE
NONCONVENTIONAL						
FLOW (MGD)	50050	REPORT	REPORT	MGD	CONTINUOUS	RECORDER
VOLATILE COMPOUNDS						
ACRYLONITRILE	34215	1.2	2.97	LB/DAY	1/YEAR	GRAB
BENZENE	34030	0.73	1.71	LB/DAY	1/YEAR	GRAB
CARBON TETRACHLORIDE	32102	1.82	4,86	LB/DAY	1/YEAR	GRAB
CHLOROBENZENE	34301	1.82	4.86	LB/DAY	1/YEAR	GRAB
CHLOROETHANE	34311	1.41	3.77	LB/DAY	1/YEAR	GRAB
CHLOROFORM	32106	1.79	4.16	LB/DAY	I/WEEK	24-HR COMPOSITE
1,1-DICHLOROETHANE	34496	0.28	0.75	LB/DAY	1/YEAR	GRAB
1,2-DICHLOROETHANE	34531	2.3	7.34	LB/DAY	I/YEAR	GRAB
1,1-DICHLOROETHYLENE	34501	0.28	0.77	LB/DAY	1/YEAR	GRAB
1,2-DICHLOROPROPANE	34541	2.51	10.16	LB/DAY	I/YEAR	GRAB
1,3-DICHLOROPROPYLENE	34561	2.51	10.16	LB/DAY	1/YEAR	GRAB
ETHYLBENZENE	34371	1.82	4.86	LB/DAY	I/YEAR	GRAB
METHYL CHLORIDE	34418	1.41	3.77	LB/DAY	I/YEAR	GRAB
METHYLENE CHLORIDE	34423	0.46	2.17	LB/DAY	1/YEAR	GRAB
TETRACHLOROETHYLENE	34475	0.67	2.1	LB/DAY	I/YEAR	GRAB
TOLUENE	34010	0.36	0.95	LB/DAY	I/YEAR	GRAB
1,2-TRANS-DICHLOROETHYLENE	34546	0.32	0.84	LB/DAY	I/YEAR	GRAB
1,1,1-TRICHLOROETHANE	34506	0.28	0.75	LB/DAY	1/YEAR	GRAB
1,1,2-TRICHLOROETHANE	34511	0.41	1.62	LB/DAY	1/YEAR	GRAB
TRICHLOROETHYLENE	39180	0.33	0.88	LB/DAY	I/YEAR	GRAB
VINYL CHLORIDE	39175	1.24	2.2	LB/DAY	I/YEAR	GRAB

PERMIT NO. LA0003301

				1		1
ACID COMPOUNDS						
2,4-DIMETHYLPHENOL	34606	0.24	0.6	LB/DAY	I/YEAR	GRAB
4,6-DINITRO-O-CRESOL	34657	1	3.54	LB/DAY	1/YEAR	GRAB
2,4-DINITROPHENOL	34616	15.44	54.9	LB/DAY	1/YEAR	GRAB
2-NITROPHENOL	34591	0.83	2.96	LB/DAY	I/YEAR	GRAB
4-NITROPHENOL	34646	2.07	7.37	LB/DAY	I/YEAR	GRAB
PHENOL	34694	0.24	0.6	LB/DAY	1/YEAR	GRAB
BASE/NEUTRAL COMPOUNDS		-				
ACENAPHTHENE	34205	0.24	0.6	LB/DAY	1/YEAR	GRAB
ACENAPHTHYLENE	34200	0.24		LB/DAY	1/YEAR	GRAB
ANTHRACENE	34220	0.24		LB/DAY	1/YEAR	GRAB
BENZO(A)ANTHRACENE	34526	0.24		LB/DAY	1/YEAR	GRAB
BENZO(A)PYRÉNE	34247	0.24		LB/DAY	1/YEAR	GRAB
3,4-BENZOFLUORANTHENE	34230	0.26		LB/DAY	1/YEAR	GRAB
BENZO(K)FLUORANTHENE	34242	0,24		LB/DAY	I/YEAR	ORAB
BIS(2-ETHYLHEXYL)PHTHALATE	39100	1.22		LB/DAY	1/YEAR	GRAB
CHRYSENE	34320	0.24	0.6	LB/DAY	I/YEAR	GRAB
1.2-DICHLOROBENZENE	34536	2.51		LB/DAY	1/YEAR	GRAB
1.3-DICHLOROBENZENE	34566	1.82		LB/DAY	1/YEAR	GRAB
1.4-DICHLOROBENZENE	34571	1.82		LB/DAY	1/YEAR	GRAB
DIETHYL PHTHALATE	34336	0.59	1.45	LB/DAY	1/YEAR	GRAB
DIMETHYL PHTHALATE	34341	0.24	0.6	LB/DAY	1/YEAR	GRAB
DI-N-BUTYL PHTHALATE	39110	0.26	0.55	LB/DAY	I/YEAR	GRAB
FLUORANTHENE	34376	0.28	0.69	LB/DAY	I/YEAR	GRAB
FLUORENE	34381	0.24	0.6	LB/DAY	1/YEAR	GRAB
HEXACHLOROBENZENE	39700	1.18	2.82	LB/DAY	1/YEAR	GRAB
HEXACHLOROBUTADIENE	34391	1.82	4.86	LB/DAY	1/YEAR	GRAB
HEXACHLOROETHANE	34396	2,51	10.16	LB/DAY	1/YEAR	GRAB
NAPHTHALENE	34696	0.24	0.6	LB/DAY	I/YEAR	GRAB
NITROBENZENE	34447	28.62	81.9	LB/DAY	I/YEAR	GRAB
PHENANTHRENE	34461	0.24	0.6	LB/DAY	I/YEAR	GRAB
PYRENE	34469	0.26	0.61	LB/DAY	1/YEAR	GRAB
1,2,4-TRICHLOROBENZENE	34551	2.51	10.16	LB/DAY	1/YEAR	GRAB

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Internal Outfall 101; Southwest corner of Block 19.

PAGE 6 OF PART I

DEFINITIONS

The term "runoff" shall mean the flow of stormwater resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the <u>NO DISCHARGE</u> box located in the upper right corner of the Discharge Monitoring Report.

OUTFALL 111 (INTERNAL)

Discharge Type: Continuous

Latitude 30°19'15"N, Longitude 91°13'45"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge once through cooling water from the manufacture of chlorinated polyethylene to Outfall 001.

Such discharges shall be limited and monitored by the permittee as specified below:

		T				
PARAMETER		<u> </u>				G 4 3 4 D 7 E
	STORET	MONTHLY			SAMPLE	SAMPLE
NONCONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW (MGD)	50050	REPORT	REPORT	MGD	I/MONTH	ESTIMATE

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Internal Outfall 111, once through cooling water from chlorinated polyethylene. Flow determined as 111 flow estimate = Total - Internal Outfall 101.

DEFINITIONS

The term "runoff" shall mean the flow of stormwater resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the Discharge Monitoring Report.

FLOW MEASUREMENTS

OUTFALL 211 (INTERNAL)

Discharge Type: Continuous

Latitude 30°19'0"N, Longitude 91°14'30"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge once through cooling water from the manufacture of methyl cellulose to Outfall 001.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER						
	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT		MOD	1/DAY	ESTIMATE
METHYL CHLORIDE	34418	AK	110	UG/L	I/DAY	GRAB

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Internal Outfall 211: Once through cooling water.

DEFINITIONS

The term "runoff" shall mean the flow of stormwater resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the Discharge Monitoring Report.

FLOW MEASUREMENTS

OUTFALL 231 (INTERNAL)

Discharge Type: Intermittent

Latitude 30°19'0"N, Longitude 91°14'30"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge process area stormwater that exceeds impoundment volume to Outfall 001.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER						CAMPIC
		MONTHLY			SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE			FREQUENCY	TYPE
BOD5	00310	45		MG/L	1/MONTH_	GRAB
TSS	00530	57	183	MG/L	1/MONTH	GRAB
NONCONVENTIONAL						
FLOW (MGD)	50050	REPORT	REPORT	MGD	I/DAY	ESTIMATE
VOLATILE COMPOUNDS					125010	CDAD
ACRYLONITRILE	34215	94			I/YEAR	GRAB
BENZENE	34030	57		UG/L	I/YEAR	GRAB
CARBON TETRACHLORIDE	32102	142			I/YEAR	GRAB
CHLOROBENZENE	34301	142		ng/r	I/YEAR	GRAB
CHLOROETHANE	34311	110	295		1/YEAR	GRAB
CHLOROFORM	32106	111	325		1/YEAR	GRAB
1,1-DICHLOROETHANE	34496	22	59	UG/L	1/YEAR	GRAB
1,2-DICHLOROETHANE	34531	180			1/YEAR	GRAB
1,1-DICHLOROETHYLENE	34501	22	60	UG/L	1/YEAR	GRAB
1,2-DICHLOROPROPANE	34541	196	794		1/YEAR	GRAB
1,3-DICHLOROPROPYLENE	34561	196	794	UG/L	I/YEAR	GRAB
ETHYLBENZENE	34371	142			1/YEAR	GRAB
METHYL CHLORIDE	34418	110	295	UG/L	I/WEEK	GRAB
METHYLENE CHLORIDE	34423	36	170	UG/L	1/YEAR	GRAB
TETRACHLOROETHYLENE	34475	52	164	UG/L	I/YEAR	GRAB
TOLUENE	34010	28	74	UG/L	I/YEAR	GRAB
1,2-TRANS-DICHLOROETHYLENE	34546	2.5	66	UG/L	1/YEAR	GRAB
1,1,1-TRICHLOROETHANE	34506	27	59	UG/L	I/YEAR	GRAB
1,1,2-TRICHLOROETHANE	34511	32	127	UG/L	. I/YEAR	GRAB
TRICHLOROETHYLENE	39180	20	69	UG/L		GRAB
VINYL CHLORIDE	39175	9	7 177	UG/L	1/YEAR	GRAB

ACID COMPOUNDS				-		
2,4-DIMETHYLPHENOL	34606	19	47	UG/L	I/YEAR	GRAB
4.6-DINITRO-O-CRESOL	34657	78	277	UG/L	1/YEAR	GRAB
2.4-DINITROPHENOL	34616	1207	4291	UG/L	J/YEAR	GRAB
2-NITROPHENOL	34591	65	231	UG/L	1/YEAR	GRAB
4-NITROPHENOL	34646	162	576	UG/L	I/YEAR	GRAB
PHENOL	34694	19	47	UO/L	1/YEAR	GRAB
BASE/NEUTRAL COMPOUNDS						
ACENAPHTHENE	34205	19	47	UG/L	1/YEAR	GRAB
ACENAPHTHYLENE	34200	19	47	UG/L	1/YEAR	GRAB
ANTHRACENE	34220	19	47	UG/L	1/YEAR	GRAB
BENZO(A)ANTHRACENE	34526	19	47		1/YEAR	GRAB
BENZO(A)PYRENE	34247	20	48	UG/L	1/YEAR	GRAB
3,4-BENZOFLUORANTHENE	34230	20	48		I/YEAR	GRAB
BENZO(K)FLUORANTHENE	34242	19		UC/L	1/YEAR	GRAB
BIS(2-ETHYLHEXYL)PHTHALATE	39100	95	258	UG/L	1/YEAR	GRAB
CHRYSENE	34320	19	47	UG/L	1/YEAR	GRAB
1,2-DICHLOROBENZENE	34536	196		UG/L	1/YEAR	GRAB
1,3-DICHLOROBENZENE	34566	142	380	UG/L	1/YEAR	GRAB
1,4-DICHLOROBENZENE	34571	-142	380	UG/L	I/YEAR	GRAB
DIETHYL PHTHALATE	34336	46	113	UG/L	1/YEAR	GRAB
DIMETHYL PHTHALATE	34341	19	47	UG/L	1/YEAR	GRAB
DI-N-BUTYL PHTHALATE	39110	20	43	UG/L	1/YEAR	GRAB
FLUORANTHENE	34376	22	54	UG/L	I/YEAR	GRAB
FLUORENE	34381	19	47	UG/L	I/YEAR	GRAB
HEXACHLOROBENZENE	39700	196	794	UG/L	I/YEAR	GRAB
HEXACHLOROBUTADIENE	34391	142	380	UG/L	I/YEAR	GRAB
HEXACHLOROETHANE	34396	196	794		1/YEAR	GRAB
NAPHTHALENE	34696	19	47	UG/L	I/YEAR	GRAB
NITROBENZENE	34447	2237	6402		1/YEAR	GRAB
PHENANTHRENE	34461	19	47	UG/L	1/YEAR	GRAB
PYRENE	34469	20	48		1/YEAR	GRAB
1,2,4-TRICHLOROBENZENE	34551	196	794	UG/L	1/YEAR	GRAB

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Internal Outfall 231.

PAGE 11 OF PART I

DEFINITIONS

The term "runoff" shall mean the flow of stormwater resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the <u>NO DISCHARGE</u> box located in the upper right corner of the Discharge Monitoring Report.

FLOW MEASUREMENTS

OUTFALL 251 (INTERNAL)

Discharge Type:Intermittent

Latitude 30°19'0"N, Longitude 91°14'30"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge stormwater from Cellulose Plant to Outfall 001

Such discharges shall be limited and monitored by the permittee as specified below:

	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
PARAMETER	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	MONTH	ESTIMATE
TOC	00680	NA	50	MG/L	I/MONTH	GRAB
OIL & GREASE	00556	N/A	15	MG/L	IMONTH	ORAB
		MINIMUM	MAXIMUM			l
pН	00400	6	9	S.U.	I/MONTH	GRAB

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Internal Outfall 251.

DEFINITIONS

The term "runoff" shall mean the flow of stormwater resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the <u>NO DISCHARGE</u> box located in the upper right corner of the Discharge Monitoring Report.

FLOW MEASUREMENTS

OUTFALL 301 (INTERNAL)

Discharge Type: Continuous

Latitude 30°19'0"N, Longitude 91°14'15"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge Chlor-alkali and Chlorine plant process wastewater to Outfall 001.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER						
	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	CONTINUOUS	RECORD
TSS	00530	4896	10560	LB/DAY	I/WEEK	24-HR COMPOSITE
NONCOVENTIONAL						
TOTAL RESIDUAL CHLORINE	50060	75.8	124.8	LB/DAY	1/WEEK	GRAB
METALS AND CYANIDE						
COPPER (TOTAL)	01042	47.0	115.2	LB/DAY	1/WEEK	24-HR COMPOSITE
LEAD (TOTAL)	01051	23.0	56.6	LB/DAY	I/WEEK	24-HR COMPOSITE
NICKEL (TOTAL)	01067	35.5	93.1	LB/DAY	1/WEEK	24-HR COMPOSITE

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Internal Outfall 301 is the summation of Internal Outfalls 311 and 321 of the previous permit. Samples shall be taken at the following locations: Internal Outfall 311; chlor-alkali plant 24" parshall flume, Internal Outfall 321; chlorine plant discharge at 48" trench concrete. For Purposes of TSS, the limit applies as the sum of TSS discharged at (a) the cell area drainage and cell washes and (b) the neutralization system facility prior to commingling with OTCW. The sum of influent flows may be used for calculating TSS mass.

PAGE 14 OF PART I

DEFINITIONS

The term "runoff" shall mean the flow of stormwater resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the <u>NO DISCHARGE</u> box located in the upper right corner of the Discharge Monitoring Report.

OUTFALL 331 (INTERNAL)

Discharge Type: Continuous

Latitude 30°19'15"N, Longitude 91°14'0"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge once through cooling water and plant washdown to Outfall 001.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER						
	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MUMIXAM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD		ESTIMATE

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Internal Outfall 331; 24-inch concrete ditch located on north side of chlorine plant.

DEFINITIONS

The term "runoff" shall mean the flow of stormwater resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the <u>NO DISCHARGE</u> box located in the upper right corner of the Discharge Monitoring Report.

FLOW MEASUREMENTS

OUTFALL 341 (INTERNAL)

Discharge Type: Continuous

Latitude 30°19'15"N, Longitude 91°14'0"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge once through cooling water to Outfall 001.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER						
	STORET	MONTHLY	DAILY	j	SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	I/DAY	ESTIMATE

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Internal Outfall 341; 36-inch flume located on the south side of the caustic block.

DEFINITIONS

The term "runoff" shall mean the flow of stormwater resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the <u>NO DISCHARGE</u> box located in the upper right corner of the Discharge Monitoring Report.

FLOW MEASUREMENTS

OUTFALL 351 (INTERNAL)

Discharge Type: Continuous

Latitude 30°19'15"N, Longitude 91°14'0"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge once through cooling Water to Outfall 001.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER						
	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	1/DAY	ESTIMATE

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Internal Outfall 351; ten foot flume located on the west side of the caustic block.

DEFINITIONS

The term "runoff" shall mean the flow of stormwater resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the <u>NO DISCHARGE</u> box located in the upper right corner of the Discharge Monitoring Report.

FLOW MEASUREMENTS

OUTFALL 361 (INTERNAL)

Discharge Type: Continuous

Latitude 30°19'15"N, Longitude 91°14'0"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge once through cooling to Outfall 001.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER						
	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	1/DAY	ESTIMATE

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Internal Outfall 361; 12-inch pipe located on the south side of the caustic block.

DEFINITIONS

The term "runoff" shall mean the flow of stormwater resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the <u>NO</u> <u>DISCHARGE</u> box located in the upper right corner of the Discharge Monitoring Report.

FLOW MEASUREMENTS

OUTFALL 37L (INTERNAL)

Discharge Type: Continuous

Latitude 30°19'15"N, Longitude 91°14'0"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge once through cooling water to Outfall 001.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER						
	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	4.1-4.4	ESTIMATE

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Internal Outfall 371; 20-inch pipe located west of Caustic block.

DEFINITIONS

The term "runoff" shall mean the flow of stormwater resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the <u>NO</u> <u>DISCHARGE</u> box located in the upper right corner of the Discharge Monitoring Report.

FLOW MEASUREMENTS

OUTFALL 381 (INTERNAL)

Discharge Type: Continuous

Latitude 30°19'15"N, Longitude 91°14'0"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge once through cooling water to Outfall 001.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER						
	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	I/DAY	ESTIMATE

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Internal Outfall 381; 20-inch pipe located on the south side of the caustic block.

DEFINITIONS

The term "runoff" shall mean the flow of stormwater resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the <u>NO</u> <u>DISCHARGE</u> box located in the upper right corner of the Discharge Monitoring Report.

FLOW MEASUREMENTS

PAGE 23 OF PART I

FLOW MEASUREMENTS

OUTFALL 3351 (INTERNAL)

Discharge Type: Intermittent

Latitude 30°19'0"N, Longitude 91°14'0"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge stormwater from Chlorine Plant to Outfall 001

Such discharges shall be limited and monitored by the permittee as specified below:

	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
PARAMETER	NUMBER	AVERAGE	MUMIXAM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	1/MONTH	ESTIMATE
TOC	00680	N/A	50	MG/L	1/MONTH	GRAB
OIL & GREASE	00556	N/A	15	MO/L	1/MONTH	GRAB
		MINIMUM	MAXIMUM			
рН	00400	6	9	S.U.	1/MONTH	GRAB

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Internal Outfall 3351.

DEFINITIONS

The term "runoff" shall mean the flow of stormwater resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the <u>NO DISCHARGE</u> box located in the upper right corner of the Discharge Monitoring Report.

FLOW MEASUREMENTS

OUTFALL 3361 (INTERNAL)

Discharge Type: Intermittent

Latitude 30°19'0"N, Longitude 91°14'0"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge stormwater from Chlorine Plant to Outfall 001

Such discharges shall be limited and monitored by the permittee as specified below:

	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
PARAMETER	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	1/MONTH	ESTIMATE
TOC	00680	N/A	. 50	MG/L	L/MONTH	ORAB
OIL & GREASE	00556	N/A	15	MG/L	1/MONTH	GRAB
		MINIMUM	MAXIMUM			
рĦ	00400	6	9	S.U.	1/MONTH	GRAB

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Internal Outfall 3361.

DEFINITIONS

The term "runoff" shall mean the flow of stormwater resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the <u>NO</u> <u>DISCHARGE</u> box located in the upper right corner of the Discharge Monitoring Report.

FLOW MEASUREMENTS

OUTFALL 411 (INTERNAL)

Discharge Type: Continuous

Latitude 30°18'45"N, Longitude 91°14'14"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted).

the permittee is authorized to discharge once through cooling water from the manufacture of propylene oxide and intermediates to Outfall 001.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER						
	STORET	MONTHLY	DAILY		SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	1/DAY	ESTIMATE
1,2 DICHLOROPROPANE	34541	N/A	0.794	MO/L	1/DAY	GRAB

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Internal Outfall 411.

DEFINITIONS

The term "runoff" shall mean the flow of stormwater resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the <u>NO DISCHARGE</u> box located in the upper right corner of the Discharge Monitoring Report.

FLOW MEASUREMENTS

OUTFALL 421 (INTERNAL)

Discharge Type: Continuous

Latitude 30°18'45"N, Longitude 91°14'14"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge once through cooling water from propylene oxide and intermediates manufacturing, diluted brine/water softener water, and clarified river water to Outfall 001

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER						
,	STORET	MONTHLY	DAILY		SAMPLE '	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	1/DAY	ESTIMATE
1,2 DICHLOROPROPANE	34541	N/A	0.794	MG/L	1/DAY	GRAB

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Internal Outfall 421.

<u>DEFINITIONS</u>

The term "runoff" shall mean the flow of stormwater resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the <u>NO</u> <u>DISCHARGE</u> box located in the upper right corner of the Discharge Monitoring Report.

FLOW MEASUREMENTS

OUTFALL 431 (INTERNAL)

Discharge Type: Batch

Latitude 30°18'45"N, Longitude 91°14'14"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge water filter backwash and water softener drain to Outfall 001

Such discharges shall be limited and monitored by the permittee as specified below:

	STORET	MONTHLY	DAILY		Sample	SAMPLE
PARAMETER	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
FLOW	50050	REPORT	REPORT	MGD	1/MONTH	ESTIMATE

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Internal Outfall 431.

DEFINITIONS

The term "runoff" shall mean the flow of stormwater resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the <u>NO DISCHARGE</u> box located in the upper right corner of the Discharge Monitoring Report.

FLOW MEASUREMENTS

OUTFALL 441 (INTERNAL)

Discharge Type: Intermittent

Latitude 30°18'45"N, Longitude 91°14'14"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge stormwater from the manufacture of propylene oxide and intermediates, clarified river water, steam condensate, and analyzer drains to Outfall 001.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER						
		MONTHLY			SAMPLE	SAMPLE
CONVENTIONAL	NUMBER	AVERAGE	MAXIMUM	UNITS	FREQUENCY	TYPE
BOD5	00310	30	80	MG/L	IMONTH	GRAB
TSS	00530	46	149	MG/L	1/MONTH	GRAB
NONCONVENTIONAL						march 4 ATE
FLOW (MGD)	50050	REPORT	REPORT	MGD	1/DAY_	ESTIMATE
VOLATILE COMPOUNDS						GRAB
ACRYLONITRILE	34215	94		UG/L	I/YEAR	GRAB
BENZENE	34030	57		UG/L	1/YEAR	
CARBON TETRACHLORIDE	32102	142		UG/L	1/YEAR	GRAB GRAB
CHLOROBENZENE	34301	142		ļ	I/YEAR	
CHLOROETHANE	34311	110		UG/L	1/YEAR	GRAB GRAB
CHLOROFORM	32106	111		UG/L	1/YEAR	GRAB
1,1-DICHLOROETHANE	34496	22		UG/L	1/YEAR	GRAB
1,2-DICHLOROETHANE	34531	180	ļ	UG/L	1/YEAR	
I, I-DICHLOROETHYLENE	34501	22		UG/L	1/YEAR	GRAB
1,2-DICHLOROPROPANE	34541	196			I/WEEK	GRAB
1,3-DICHLOROPROPYLENE	34561	196			1/YEAR	GRAB
ETHYLBENZENE	34371	142	1		I/YEAR	GRAB
METHYL CHLORIDE	34418	110		UG/L	1/YEAR	GRAB
METHYLENE CHLORIDE	34423	36		UG/L	1/YEAR	GRAB
TETRACHLOROETHYLENE	34475	52			1/YEAR	GRAB
TOLUENE	34010	21			1/YEAR	GRAB
1,2-TRANS-DICHLOROETHYLENE	34546	2:			I/YEAR	GRAB
1,1,1-TRICHLOROETHANE	34506	22		UG/L	I/YEAR	GRAB
1,1,2-TRICHLOROETHANE	34511	37				GRAB
TRICHLOROETHYLENE	39180	20		UG/L		GRAB
VINYL CHLORIDE	39175	9	17.	UG/L	1/YEAR	GRAB